

# ELECTRICAL CONTRACTOR ~ DEALER

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## ***The New Year's Outlook***

Some writer, greater than the present one, has said that life is what we make it. This classical epigram might be applied to the past performances of commercial pursuits during the last twelve months—business is what we made it.

In electrical lines business has been good, and it still is good. It has been constant, regular, and sure. This is due to the general attitude toward the industry by those in the industry. They are enthusiastic, ambitious, and hopeful; they know that they are working in a big field; they realize that it is in a state of development; they see that their work is of a preliminary nature; but that it shall long endure; and that future generations will enjoy its greater benefits.

How unlike many other industries has this attitude been during the past few years! The necessities of war called for excessive production. Because the electrical industry was new and inexperienced in such matters, it speeded up to meet requirements, without thought of expense or profits. But the wily old industries that had grown crafty in their greed gave not a thought to speed until they were assured of remuneration. It was not a question of "How much can we do?" but "How much can we make out of it?"

There then began an era of brigandage unequalled since the days of the plundering pirate. Prices soared to the point of prohibition. People paid the prices that were asked; and with but little complaint, for money was plentiful. The spending craze encouraged the profiteers and up went prices again. But there came a day when the purses of the public were empty. The war was over—production was curtailed—shelves were overloaded—and prices took a drop.

Business is what we make it, and the profiteers made the present condition themselves. They planned not for the future; they gave not a thought to the results of their profiteering; they figured only on the time that they could pile up profits. The only wise thing that they can do now is to take their losses and look pleasant.

Such an attitude will help all lines of business. It is a case where the losers should say nothing, but saw wood, as the saying is. The present pessimistic attitude is harmful. It destroys confidence, retards progress, and creates

fear all around. The only panic is among the profiteers. Let them keep it there—they brought it on, let them throw it off.

Whatever the pessimists may say, the world is going right along as usual. Business will not stand still—not in electrical lines. People must be housed; they must have a place to live; they must have light. The time has come when the process of erecting a building calls for electrical employment. After the completion of a building it will be found that electrical devices for giving out light, heat, or power, are required. And so long as that building stands, some kind of electrical apparatus will be used in it. Then when it is demolished, the new building to take its place will require additional things electrical for its maintenance—and so on to the end of time.

Therefore, as we started to say at the beginning—pardon the digression—the outlook for business during the new year of 1921 is most promising. Business is what we make it, and we are going to make it good in the electrical business. Although we are working for the future, we are mindful of the present. We are not taking on any more than we can carry. We welcome the new year with prospects of continued prosperity. We have faith in our own business, sympathy for those lines that are less fortunately situated, and we believe that we have every good reason in the world for wishing everybody *A HAPPY NEW YEAR!*

## ***A Good Investment***

One of the prime factors entering into the growth and development of modern business is advertising. It hastens progress and leads to prosperity. It shortens the distance between the producer and the distributor and brings the ultimate consumer into almost immediate contact with the product. And yet the contractor-dealer is likely to leave advertising out of his calculations when he is opening his new store.

The reason for this is that advertising is just about as new as is the present application of electricity to the welfare of the world. Even since the days when electric lighting was first employed, advertising has often been looked upon with suspicion. An over conservative business man believed it to be nothing much more than blue sky. Some there are yet who will not admit its efficacy, but they are few.

In the contractor-dealer business advertising should be taken into account even before the doors of the new store are opened to the public. The location of the store is important, of course, but that is largely determined by the available places for rent. Then comes the selection of an electrical stock, which is governed to a considerable extent by the amount of money to be invested. But before either one of these serious questions is decided, a certain sum to be invested in advertising should be settled upon.

Advertising is an investment, the same as a stock of goods; for an investment is the laying out of money for the purchase of something that will bring profit. It may be that advertising will not make a profit at all times; neither will the stock of goods always prove profitable. Advertising will make the stock of goods more profitable. Yet the average contractor-dealer is quick to make an investment in stock, whereas he is slow to invest in advertising.

Authorities differ as to the amount of money that should be appropriated for advertising purposes. Sometimes they make an attempt to regulate it by the percentage of profit, but usually it is figured as a percentage of the gross business. On this basis, some retail lines never think of allowing less than five percent for the advertising investment; and yet composite figures procured from its members by the National Association of Electrical Contractors and Dealers show only a fraction of one percent invested in advertising.

Such a sum will not begin to pay for really profitable advertising, especially for a line of goods that are being introduced to the public—practically an unknown line. Even six percent could not be properly termed a gamble; but to be conservative, five percent is not exorbitant. As an investment, this amount is not excessive; but where advertising is looked upon merely as an added expense, and the appropriation for such purpose is shaved down in accordance with such a belief, then it is perhaps best not to advertise at all.

No man in the electrical contractor-dealer business will hesitate to invest a few cents additional on every dollar he pays a salesman that actually produces the business which justifies it. It seems strange that the same man will not make an investment of a few cents additional on every dollar he appropriates for advertising. Anybody can come along and take his producing salesman away from him with an offer of more money, and thus the productivity of that particular salesman is lost to him. But nobody can take from him the results of a profitable advertising investment.

The results of advertising belong to the advertiser forever; and so long as the advertising continues, the effects become accumulative. Every inch of the right kind of advertising inserted in the proper medium by a well managed business organization will become an everlasting asset. And like a savings bank nest egg, the interest will accrue and compound so long as the account stands.

Regardless of immediate returns; without considering direct sales; giving no credit to advertising for hastening the period of turnover; think what an invaluable factor an advertising investment is in the furtherance of good character, public esteem, and good will! No progressive electrical contractor-dealer can afford not to invest in advertising to the full extent of his means.

### Old Fashioned Ideas

The story is told of the president of a large manufacturing company in a western state who has posted on one of the plant's bulletin boards the following notice to employees.

"I am never too busy to talk to any man who has something on his mind which worries him. Come in to the front office any time if you have a real kick. Probably I can help solve it. That is mainly what I am here for."

It is said that the man who is responsible for the posting of this unusual notice is really busy, but that he is always able to find time to listen to the complaints of his workers, and that such an attitude on his part has been effectual in settling many serious disputes and of eliminating a great amount of dissatisfaction around the plant.

This is an example of the right kind of contact between the employer and his employees. There is nothing new about it except that at present it is in operation. It is an old fashioned idea coming from the time when the boss worked at the bench beside his workmen. At that time they were the best of friends because of their propinquity. They enjoyed each others company.

Things have changed. No longer does the employer meet his workmen as one of them. The day of the hearty handshake between them is past. They now meet as strangers—sometimes as enemies. They dare not confide in each other for the general reason that they both have a good deal to conceal. They feel that they cannot trust each other.

But here is an employer, the president of a large company, so it is reported, who comes out into the open. He invites his workmen to bring their troubles to him. He welcomes them in the spirit of good will and helps them to solve their problems.

Employers of labor will do well to follow this old fashioned custom which comes to us in a new dress. Even the contractor-dealer who may employ but a few workmen—some of them sales people only—will find it profitable to cultivate their acquaintance. It may be that this is a good way to quiet the prevailing unrest. It may help to increase production. At any rate it is sure to create loyalty.

### Working With the Head

The man on the job scoffs at the idea of desk work being called difficult. Never can the manual laborer realize that pencil pushing, or sales talking, or business planning is actual work. He does not designate as work such occupations as estimating and accounting. He believes that about the easiest job in the world is to run a contracting business or a retail store.

The contractor-dealer branch of the electrical industry is made up mostly of men who have held these ideas—some of whom are loath to part with them. They never have learned that muscular exertion alone will not run a contractor-dealer business. When they observe the success of others they may realize that brain work is necessarily a large part of running a business.

The man that works with his head instead of with his hands—or with his feet, as so many of them do—is in a fair way to accomplish something. In the first place it re-

quires hard thought to plan the opening of a business; still more difficult mental exercise is required to manage a business; nothing short of intensive brain work will keep a business going; and when it comes to keeping down expenses and increasing the profits, no form of physical labor is quite so hard as the mental gymnastics that are necessary to be performed in order to accomplish this task.

All the work below his shirt collar that a business man does, he can hire somebody to do. But the head work he must do himself. It is not easy. It is not time work nor piece work. It usually requires the full twenty-four hours a day to do it right. Hire a man to do it and either there soon will be no business, or else the business will belong to the other fellow if he succeeds in accomplishing his purpose; for a successful head worker does not work for somebody else very long.

The contractor-dealer should aim to be a real business man. He should exercise his thinking powers and work with his head. He should make use of his brain and cultivate his mental faculties. He can buy muscle at about so much per pound; he can hire all kinds of physical workers; but head workers that might supply the brains for his business are not to be had. He must establish his own thought department for himself, and keep away from the really easy job—the muscular work and physical labor—if he wishes to be a successful business man.

### Not All of One Mind

Where would be the spice in life if we all were of exactly one mind? One man looks at a proposition this way; another fellow looks at it that way; the third one looks at it another way. Then come the discussions that lead to arguments. The question then usually simmers down to two sides—is the proposition right or wrong?

When an argument reaches the yes or no stage, then it becomes interesting. Not until that point is reached can any definite information be brought out concerning the subject in dispute. It is only when a spade is called a spade that interest is aroused. After a disputed question is argued pro and con, everybody who takes a part in the discussion is bound to gain some knowledge—or at least to see something on the other side that is worthy of thought.

At almost every meeting of organizations in the electrical industry, when questions arise on which all do not fully agree, objections are raised against arguments. It is so in every industry—in every organization of whatever nature.

If all men were made of one mind there would be no need of organizing. With everybody holding exactly the same opinion on all questions, one man could act for all—or indeed there should be no necessity for delegating one man to act, for each individual would be assured that all others would join in the same action.

That time has not come. It may appear with the millennium—it may never come. In the meantime, men will meet together and questions will arise that will be discussed and argued; points will be brought out that will be disputed; there will be controversies; but such a condition is only natural. Good is sure to follow if everybody is working to the same end. Arguments will lead to the right and proper decision.

Those who complain because of slight disagreements due to divided opinions, do so unjustly. And as a rule the objectors will be found to be wholly one sided—or perhaps are entirely devoid of interest in the debate. They are the ones that should take an active part in it—they require more complete information. Surely they are not helping matters by standing aloof and making protests. Getting together is not always harmonious, but harmony can be attained if all will work together to that end.

### To Eliminate Guessing

There are times when the man in business doubts whether two and two make four or three. Often it seems as though the latter result is correct, for after buying materials at a low cost; billing them at a higher price; putting in long hours of what seems to be profitable labor; and then having nothing left for himself after all settlements are made—there would appear to be reason for thinking that figures do lie, contrary to the customary belief.

But look into such a man's methods of figuring. He does not keep book records of any of his transactions. He guesses at the amount of materials used, guesses at the cost, guesses at the hours on the job, guesses at the bills payable, and guesses at the amount he should receive, and if he is a good guesser, he makes a profit. But most gamblers are poor guessers.

There is no longer good reason why any man in the electrical contractor-dealer business should be a guessing gambler. He need no longer guess at his costs. His time and material may be put down in plain figures. He will know his income as well as his outgo. Then he will know positively that two and two are four, without guessing.

This opportunity comes to the contractor-dealer through the new Business Record of the National Association. After the most successful employment of the Standard Accounting System for Contractors and Dealers it was found that there are many one man concerns in this branch of the industry that cannot afford the expense of a bookkeeper. In some instances even a large contracting business is conducted by one man, the transactions being of a nature that does not justify establishing the Standard Accounting System. And so the owner of that business carries his figures in his head and enters his costs on the back of a soiled envelope—which often is lost before the transaction is completed, and he then joins the amalgamated guild of guessers.

The new Business Record of the National Association will supply all such needs. It is designed to cover the requirements of any contractor-dealer business that is not organized for an accounting department. The idea has been to work out a simple system of recording all transactions, whether it be used by a one man establishment or in a business employing workmen and sales people, but no bookkeeper.

The object of the new Business Record is to make it so easy to enter the various items which go to make up the day's doings that it never will be neglected. As a man sleeps to prepare his mind and body for the duties of the next day, so he will make a record of every transaction in order to have his business in readiness for the day's work. It will relieve his mind, put him at ease with the world,

eliminate the strain of guessing, and thus assure happiness.

Indeed it is a happy feeling to know to a dot just exactly how the business stands. Mental uneasiness is more tiring than physical exertion. Gamblers grow gray in their twenties. Guessing causes it—mental unrest—trying to make four out of two and one.

The National Association has announced that the new Business Record is now ready for delivery. The cost is so low that no contractor-dealer who does not use a well established bookkeeping system can afford to be without it. In fact the figures quoted on this new system are factory

cost—there is no profit in its sale to members. The National Association recognized the necessity for such a system and after months of careful study and compilation, now issues the first edition solely for the benefit of members. Those who do not belong to the organization are required to pay a small advance in excess of the cost of manufacture.

It is believed that the adoption of this new Business Record by electrical contractor-dealers will be the means of placing this branch of the industry in an enviable position with the trade in general.

## Bright Prospects for the New Year Are Prophesied by Our Advertisers

Various Interests in Electrical Industry See Period of Prosperity for 1921, as Peak of Readjustment Has Been Passed

In a general letter sent last month exclusively to advertisers in the ELECTRICAL CONTRACTOR-DEALER, inquiry was made as to how our advertisers felt regarding business prospects for 1921 in the electrical industry. Without exception, the replies indicated an optimistic view.

A glance through our advertising pages will show how varied are the interests; they are all allied in some manner with the electrical industry; they are located in many different sections of the country; but the general opinion of business conditions for the future seems to be the same all around.

The replies are so interesting that a few of them are quoted. From a New York concern comes the following:

"I do not believe, and it is the opinion of others, that the electrical industry is being hurt very much either right now or that it will be hurt during 1921. In fact, in my various travels here and there, it seems to me that there is more activity in the Christmas electrical field than in any other line and I too am with you in your optimistic opinion."

A Chicago manufacturer says: "We are inclined to agree with you as to your views on the outlook for business during the year of 1921, as we believe that if building opens up after the first of the year it will undoubtedly mean a nice volume of business for the electrical industry."

The vice president of a prominent New York company writes: "Relative to our views on the prospects of busi-

ness for the year 1921, while the present depression may last for several months during the first part of the year, we, however, anticipate that on the average the year 1921 will be a prosperous year."

From a manufacturing company in Connecticut: "Answering the fourth paragraph of your letter, relative to a business prophecy for next year, we entertain the same opinion as you do in this respect."

Another New York manufacturer writes: "We are glad to note that you believe that 1921 will be a prosperous year in the electrical industry, but question your statement that this is contrary to the prevalent opinion. Instead of a pessimistic view, the writer, who has just returned from the West, found that everyone is looking forward to big business next year."

An old established house in Philadelphia says: "It is the opinion of the writer that from the present outlook we are all going to have good business in 1921."

Another Chicago manufacturer says in part: "We are of the opinion that due to the large amount of building which will be necessary to make up for the lack of same during the past few years, the electrical business should be good."

From a large manufacturer in upstate New York: "We agree with you that 1921 ought to be prosperous. The readjustment period was inevitable and we have passed its peak. There is an immense amount of business to be done. Times will be slow until early Spring, when we look for substantial

improvement and a rapid development of business."

A company that does not confine its output to the electrical trade writes: "We believe as you do in the prosperity of the coming year and we are doing everything in our power to bring it about."

This one from a large manufacturing establishment of Detroit, Michigan, is a sermon in itself: "We are of the same opinion that you are regarding the year 1921, that it is going to be a prosperous year. We do not feel, however, that it is going to be a wild, hectic year, such as we had in 1920 and in 1919, but we feel confident that shortly after the first of the year business in general will open again, perhaps slowly at first, with a consistent ever increasing volume and that all business organizations built on sound fundamental principles will be able to capitalize upon their experiences of the last four or five years."

"We are making our plans and at every opportunity we are preaching the gospel of head up, both feet flat on the ground, be prepared to move forward, perhaps slowly at first, but surely, and to eliminate all uneconomic factors that in the past have had a disturbing effect on the whole. We believe that a great many fly by night organizations which have sprung up in our midst will be eliminated and the older and more substantial and reliable organizations will survive and continue doing a healthy, profitable business."

A big lighting company located in the East writes: "The present business conditions are the logical results of the

last four or five years, and I think it is very fortunate that the country is being tided over in as good shape as it is. Electrical contractor-dealers, electrical jobbers and manufacturers are closely tied up with the building needs of the country. I believe 1921 will see the launching of the largest construction

program in years, and this presages prosperity in the electrical industry."

The vice president of a New Jersey manufacturing concern says: "Regarding your enquiry as to the possible prospects for the year 1921, the readjustment that is being felt now we have every reason to believe is but the

forerunner of a very even and increasing business period—nothing of the character of the past year or so which has been very unsatisfactory both to buyer and seller. What everyone really needs in business is a good, clean, competitive market, with a fair and constant flow of business."

## The Enlightening Effects of Electricity

BY JANE LAKE

**Tardy Advancement of Far East Largely Due to Lack of Modern Means of Lighting, Adoption of Which Would Assure Uplifting Influence**

I had been out in the Orient only long enough to be afraid of it. The ambition of my mature lifetime had been to go there and see for myself. To be there and listen to the tinkling monotone of their picturesque native existence seemed to me to be the ultimate acme of happiness when compared to the orchestral diversity of the tragical living which we occidentals had been undergoing for the last period of our conscious being.

The stolid finality of their cruelty shown in the history we had read seemed to be like a light romance compared to the everyday horror which was abounding to our positive knowledge in our immediate gasping-for-breath days of the present. I wanted to get away from it all—wanted to get into the medieval past of the heathen—far enough back to forget the changes and the carnage that the socalled humane civilization of today had brought about.

And so to the far distant dreamland of the mystics by the shortest known route I hurriedly pushed myself away from the tumult of war and sought for the supposed quiet and peace of life in the extreme East.

Where we are not, so our observation is not. This I found to be a free translation of an old proverb well known to Confucius. To use the vernacular, I am rapidly becoming a Confucius fan. The longer you are in Japan the more you learn of Confucius, and the longer you stay in China the more conversant you become with the morals of the Shoguns, of which the Chinese seemingly know nothing.

### *Assuming Ignorance*

This sounds so paradoxial that it proves just what I started out to say. I am afraid of the Orient. They say they know nothing of the things which

they are so ready to tell you all about. They tell it so well, besides, that you never forget it, and you begin in your best occidental thinking manner, to wonder why you listened to them when they have already assured you that they can tell you nothing more about the thing of which you are so anxiously seeking additional knowledge.

In Egypt you knew that the wily Arab who guided you back into antiquity was lying and you listened to him for the pure joy of seeing if he could carry it on. He could—he did—you laughed—you paid him willingly—you went your way satisfied, and you forgot it. It was part of your day's delight to be so palpably deceived. It was the desert's mirage brought to life.

In the Orient you know—since they frankly tell you so—that what they relate to you is more or less romance, but contrary to the passing amusement of practically the same thing in Egypt, you cannot forget it here; and you think of it after you corral yourself alone in your night's quarters; you think and think, and find yourself wondering what there possibly is in your remote home training, education, or association, which really shows that these heathen are so damningly wrong.

After all, here is where they live. Their air, their manners, their customs, their unlivid-up-to laws—all the conditions are so totally foreign to us—what can we really know about it? And it seems actually that their very humanity is different from our own. Perhaps theirs is the correct viewpoint. And right there you begin again to be afraid. And you wonder what it is that causes you to be so fearful.

### *Something is Lacking*

The uncertain thing that we fear is always the hardest to overcome, and

while we may not be actual physical cowards, we worry along and unconsciously seek for the answer to our unvoiced questioning. Why has the Orient this atmosphere of menace for us? What is it that forces us figuratively—yes, and many times literally—to keep furtively looking over our shoulder?

Maybe they are right. If so, what then? Where are we? What are we? And why are we—with all of our culture and higher education?

Then we think of how we go over into their countries for entertainment—or profit commercially—and we invariably come away mystified, while they send their young manhood over here to glean of our scientific research and philosophy. Has anyone ever heard of one of these young persons going back baffled and reporting that we are so far beyond, behind, complex, or occult that they are mystified by our advancement? Indeed, no!

They stay in our academic midst until it all seems simple to them and they master in a comparatively short time all it has taken our students centuries to perfectly comprehend. They take it back to the East, incorporate it and inculcate it into their principles of education, manufacturing and general commerce, until when we go there to observe, it is so absorbed in their very existence that we think it has come out of their own history and progress.

And our mystification continues. It all tends to add to that intangible something which makes us quaver inwardly. Almost a doubt of our own structure of reasoning enters the mind unawares.

### *Seeking the Cause*

Having come back from a long

tedious stay in the desperate discomfort of the Pekin district into the comparative western civilization of an English owned Hong Kong hotel, I was musing on what China most needed. She has a little of everything that is good and she certainly has a great deal of all that is decidedly bad. What one thing could give her the most and the quickest improvement? It would require a miracle to put this great population of grossly ignorant and suffering humanity on a closer par with modern countries of the other hemisphere.

Education is the first word that comes to mind when thinking of grave problems yet to be solved, but education is a process long in the making. The longer the better to make it the more lasting, and our form of it they definitely need in the East.

China needs something quicker; something that will startle into wakefulness everyone of her millions of dirty unwashed souls into a more healthy activity. Young China is working on political reform which is for all good and an acknowledged advancement, but what do the coolies who are dying by thousands every year really know about what the actual government means? What they want is something tangible at their very doors—at the gangplanks of their miserable boats wherein they go to their deaths as we know, like stupid cattle to the slaughter, for the want of simple betterment of living conditions.

This class of Chinamen do not know that they want a change, nor does anybody tell them what they ought to need. They might even resent, to the fighting point, anything which would appear to be an intervention in their traditional living habits. We all know how often this has happened to the almost utter discouragement of our western representatives sent out there for their enlightenment.

#### *Discovering Their Need*

In my continued self questioning I tried to find what it was in the surroundings of this European hotel that seemed to quiet the unnamed terror of the past weeks that I had spent in the interior. What was the lack I had recently felt which now seemed to be supplied? I was too seasoned a traveler to fancy that it was the variations of familiar and palatable food, or more comfortable sleeping arrangements, when suddenly it dawned on me that I

had been living in a state of mind which was a fearsome recollection of earliest childhood.

Darkness—that was it! I had been actually afraid of the dark again. Light was what I had been unwittingly craving. I had not been afraid of the tricky creatures themselves, but I had had a horror of hearing them slip slyly about me in the dark. It had gotten on my nerves and I had not known what it was.

Now the whole thing seemed clear. Light is what China needs—light everywhere within its boundaries. Not one dark place should be left to which these people of crafty complexities could crawl. The narrow streets and byways should be lighted. The tiny twisted passageways of their buildings should not have a corner left in shadow. Even the open spaces where their houseboats are huddled together into seething masses of dirty dark pot holes of evil should be made a great glare of light at night, until they shall have learned the benefits which are to be derived from the universal good of open to the air and sight living!

Publicity is the surest cure for crime, and our white light of the most modern illumination is surely the miracle which can rehabilitate this numerically enormous people, do away with their traditional treachery, and remove those conditions which have brought so many of our own race to a distressing doubt of what moral civilization means.

Cleanliness as is so well known is next to godliness; light certainly is an enemy to dirt; dirt is the greatest ally of disease; disease and crime go hand in hand—usually they wear indestructible handcuffs, the keys of which have been permanently lost.

What one thing about electricity is there that is not clean? China is not the first country which has not known what really was the best thing for it. But if the doctrine of electricity could be more or less forcibly incorporated in the precepts of the governing bodies of every remote district of the inner as well as the foreign quarters of all the towns, villages and cities of China, what untold good would at once develop!

Electricity is utilized for everything that is good—for light, heat, power; it is used with marvelous success therapeutically and for scientific research in every direction. If this one thing could by some great chance be universally

thrust on such a country as China—broadcast, broadside, down and up, the entire land—what a miracle it would really be!

The greatest one thing needed in any benighted region is electricity. The thing itself has a civilizing influence—it is broadening, enlightening. The employment of electricity for furnishing light, heat and power is educational—it uplifts, elevates, and establishes in dull humanity a new activity which at once becomes a means of advancement.

#### New Commandments From The Reminder

1. Thou shalt not wait for something to turn up, but thou shalt pull off thy coat and go to work that thou mayest prosper in thy affairs and make the word "failure" spell "success."
2. Thou shalt not be content to go about thy business looking like a loafer, for thou shouldst know thy personal appearance is better than a letter of recommendation.
3. Thou shalt not try to make excuses, nor shalt thou say to those who chide thee, "I didn't think."
4. Thou shalt not wait to be told what thou shalt do, nor in what manner thou shalt do it, for thus may thy days be long on the job which fortune hath given thee.
5. Thou shalt not fail to maintain thine own integrity, nor shalt thou be guilty of anything that will lessen thy good respect for thyself.
6. Thou shalt not covet the other fellow's job, nor his salary, nor the position that he hath gained by his own hard labor.
7. Thou shalt not fail to live within thy income, nor shalt thou contract any debts when thou canst not see thy way clear to pay them.
8. Thou shalt not be afraid to blow thine own horn, for he who faileth to blow his own horn at the proper occasion findeth nobody standing ready to blow it for him.
9. Thou shalt not hesitate to say "No" when thou meanest "No," nor shalt thou fail to remember that there are times when it is unsafe to bind thyself by a hasty judgment.
10. Thou shalt give every man a square deal. This is the last and great commandment, and there is no other like unto it. Upon this commandment hang all the laws and profits of the business world.

# The Contractor-Dealer and the Central Station-- Their Interests Are One and the Same

BY MORSE DELLPLAIN

Address Delivered December 1, 1920, Before Annual Convention of  
Indiana State Association of Electrical Contractors and Dealers,  
South Bend, by Vice President of Northern Indiana Gas & Electric Co.

As contractor-dealers you are vitally interested in the new business policy of the local electric light and power companies in your several communities. This policy will depend absolutely on whether or not there is any money in new business. You cannot expect intelligent business men to invest money in extending their business if they cannot see a reasonable profit in doing so. If there is not a reasonable profit in business we must expect a policy of retrenchment on the part of business men. A policy of retrenchment on the part of utility operators in this state means a curtailment of business for the members of this association; therefore you gentlemen should be and probably are very definitely interested in the question of what you can do to prevent a policy of retrenchment being adopted by the utilities in your several communities.

My message to you in this connection may be summarized in the simple statement that a prosperous utility will always be found ready to keep up with the growth of the community; in fact, it is usually several laps ahead. You are all, therefore, interested in the questions: "What makes a prosperous Utility?" My answer to this question is: "Plenty of business at adequate rates."

I can hear you all saying: "Why that's nothing new; that's true of any business." Exactly, but for some reason or other the general public has failed to appreciate that the utility business is subject to the same laws that govern every other business, whether individual or corporate. It has become necessary for utility managements to indulge in the commonest sort of bromides in order to get their story to the people in whose hands the prosperity of the utilities or the lack of it rests today.

To you, as that part of the general public who should be able to readily see the utilities viewpoint, I shall enlarge on how you can do your part to help the utilities in your several com-

munities to be prosperous, and I shall keep in mind that the benefits must be mutual to be fully effective.

First—How can electric utilities have plenty of business? Intelligent coöperation between the several members of the electrical fraternity is the greatest single force for increased business in our specific field.

For a business man to address a body of business men on the subject of co-operation is a dangerous proceeding in these days, but I believe neither the attorney general's office nor the general public will find any objection to the kind of coöperation of which I am going to speak. That is the coöperation which automatically comes from the placing of our business on a sound economic basis not only in our own interests but in the interests of the people.

Webster defines coöperation as the act of working together to one end, or the act of working with mutual efforts to promote the same object. In order to coöperate intelligently, therefore, it is necessary first of all to determine the end towards which we are working and the object which we are seeking to promote.

There is not much difficulty in securing coöperation when the end in view means a net gain to the side whose coöperation is requested but coöperation always stops when the result fails to be a net gain to the parties coöperating. This is simply the expression of an economic law.

It happens, however, that in most attempts at coöperation the parties concerned are unable for various reasons to discern the distinction between apparent loss and ultimate gain. What is in reality ultimate gain often looks like loss until a closer analysis is made to reveal the true conditions.

### *Unsound Reasoning*

Conversely, an apparent net gain may prove to be, through mature experience, a decided loss. For example, a policy which central stations generally adopted in the early days of the

industry, the selling of appliances at cost, and very often at less than cost, through the mistaken idea that the business obtained through increased current consumption would more than offset the demoralization of the appliance business in the territory. This reasoning was unsound and I believe the majority of central stations realize it. Central stations have found that the apparent benefit of cut prices in the early days has since proved to be a serious handicap to legitimate merchandising. You will pardon the personal reference, but I want to take time to tell you that I pride myself on being among the first of central station sales managers to raise a voice against this unsound policy and to insist on appliances being handled by central stations on a strictly sound merchandising basis.

It would be unfair to say that no good has come from the old practice, as to it is probably due the present day knowledge and popularity of electrical appliances with the general public, but there is a question whether the same results could not have been accomplished through more businesslike means.

Under present day conditions of the appliance market, there can be no excuse for the selling of appliances excepting on a sound merchandising basis and at a price which will allow a reasonable profit to those who must depend entirely upon the merchandising business for a livelihood. Such merchants are entitled to a fair return upon their investment, as well as for their labor and initiative.

We find that to have successful co-operation, it is essential that the end to be attained and the object to be promoted shall be clearly defined; that these be based on economically sound principles; and that the parties concerned fully appreciate the difference between an immediate but shortlived benefit and a possibly delayed but permanent advantage.

I believe the end to be attained and the object to be promoted through the

coöperation of the electrical fraternity is the placing of the electrical business on an economically sound basis with regard to public utilities, electrical appliance and construction merchants, both wholesale and retail, as well as the general public of this great commonwealth. To bring this about I believe is a comparatively simple matter. It calls, of course, for a full expression of the opinions of each of the many branches of the industry and a subsequent analysis of these opinions from a sound economic standpoint, but there are one or two fundamental principles which we can accept as basic facts.

In order to continue in business it is necessary to make a return upon the capital invested as well as a proper profit for our labor. Any concern, electrical or otherwise, which does not keep this fact foremost in mind must of necessity be a failure sooner or later and a failure is no credit to any industry or to any community.

Another fundamental principle is that the public has a right to demand value received for the price paid. A contractor cannot expect to stay in business if his work does not measure up to present day standards and we cannot fail to note that these standards are being raised every day. This is again simply the working of an economic law.

In the public utility field the standards of service are constantly being raised so that today a central station is forced by public sentiment to maintain its service in all its branches at the very highest point. This holds true throughout the merchandising field. The standards of service in every branch of business, even in the most humble community, have been raised many fold in the past decade.

The buying public is vitally interested in these matters. A community that can depend on its electrical industries to invariably do good work and supply only first class goods can establish a national reputation which would be truly enviable. I believe it is within the power of the electrical fraternity through your association to accomplish this and I know that the business man and the general public can be depended on to do their share in promoting any object which means the upbuilding of any legitimate industry.

#### *High Standards Advocated*

Almost from the start central stations have maintained high standards of

quality in the electrical appliance field. I can safely say that the quality of goods sold by central stations throughout the country has been of the highest. Manufacturers of inferior goods have found no market for their wares among the central stations and have been forced to sell their product to less discriminating purchasers, which I am sorry to say, they seem to have had no difficulty in finding among the smaller contractor-dealers. Central stations who have undertaken electrical construction work in self protection have invariably maintained high standards for this work and have found it as easy to sell good appliances and to do first class work as to sell inferior appliances and do second rate work and in the end found it to be far more economical.

If the central stations have found this to be true, why is it not possible for jobbers, dealers and contractors to do the same? I believe it is and it only remains for us all to get the broad viewpoint that comes from having our business on a sound economic basis. To do this we must find out whether we are handling A-1 goods; whether our advertising is what it should be; whether our stock is being tastily displayed; whether we are giving value received for every dollar taken in; whether we know what our costs are; whether we appreciate the vital distinction between fixed charges, wages, and net profit; and whether our fellow citizens, especially our competitors, can say of us that we play the game on the square.

If we can answer "yes" to all of these, we need worry little about lack of coöperation for we will find that the results to be obtained through proper coöperation have always been here if we will only allow simple economic laws to have a chance to work.

The lack of coöperation is due to the fact that we have not been keeping in mind the end to be attained or the object to be promoted. Those of us who have analyzed this subject carefully and have studied the problem in its several phases have had little difficulty in appreciating the value of the fundamental principles which I have stated. Those of us who have not given these matters consideration can well afford to adopt them on faith and determine their soundness through personal experience.

When the electrical fraternity in a community learns the working of simple economic laws and allow these laws to function, our utilities will have

plenty of business and the members of your association will have all the business you can possibly handle.

The next question is—How can our utilities have adequate rates? The best answer I know to this question is: "A demand by the people that the utilities receive adequate rates."

Creating this demand is something which the members of your association have it distinctly within their power to accomplish. No one comes so closely in contact with the people of your several communities on matters electrical as do you and your employees. Any comment which you or your employees make with regard to the local utilities is always accepted as one hundred percent or more, as it carries the weight of one speaking with authority.

How often does it happen that a local electrician will make a disparaging remark regarding the local utility, little realizing that that remark accepted at face value by the layman, and passed on to hundreds of others tends to create public sentiment against the utilities, with the result that any application for a rate increase encounters at once an antagonistic public sentiment! A public sentiment strongly opposed to a local utility makes it next to impossible for the Public Service Commission to deal fairly with this application. This in turn leads to a curtailment in the extension policy of the central station with a consequent curtailment in work for this same electrician who is in part responsible for the existing condition. We are all interdependent, and little do we realize the power of even the most humble of us for good or evil.

As an example, the apparent opposition on the part of the citizens of this great commonwealth to having utilities fairly dealt with has seriously affected the ability of the utilities to borrow money with which to extend their plants and distribution systems. Unless confidence can be restored in utilities' investments through an improved public sentiment and increased net earnings, investment in utility securities will be at a minimum for the next few years, and extensions must necessarily be restricted and the community will suffer along with the individuals directly affected.

It is a somewhat startling statement—one not generally comprehended—that the average utility company must spend \$1 for equipment for every 20 cents of gross revenue—total receipts in the

form of charges—that it receives back in a full year. Take the balance sheet of any utility company, pick any that you know of, and see if this is not a fact.

That equipment is a permanent fixture in the community. It is paid for by the sale of securities to thrifty investors. It could not possibly be paid for out of earnings; that can be readily seen by any fair minded man.

With money available only at prices averaging 10% and over, how can utilities expect to borrow any of this money if the peoples' representatives insist that 6% and 7% on a greatly depreciated valuation shall be considered a reasonable rate? I bespeak your thoughtful consideration in the interests of your local utilities whose prosperity holds such close relation to that of your own business.

#### *Prosperity Good for All*

One would sometimes think that it was criminal for a public utility to be prosperous. As a matter of fact, from the standpoint of everybody concerned—the public served as well as the owners of the property—this is the most desirable condition.

If it isn't prosperous, not alone will the holders of securities suffer, but the employes must suffer, due to failure to secure the wages which they ought to get; the community will suffer on account of poorer service and failure to secure adequate extensions of service.

No city or town can be more prosperous than its utilities. This is a demonstrated and admitted fact. If its utility companies are "starved" and unable to furnish adequate light, heat, communication or transportation services the city immediately feels the effect.

Paralyze any one of these services; cause it to entirely suspend—consider what would be the effect not only upon all business, but upon the convenience, happiness and contentment and everyday life of every citizen—man, woman or child.

When a utility company is abandoned, suspends or becomes bankrupted in any community, the financial effect is widespread and immediate. Bonds of that community are immediately affected, for to the outside world it causes immediate doubt as to the fairness of its citizens. New capital in any line of industry hesitates to seek investment in that locality, going to communities more progressive and who have more

carefully guarded their reputation for fair dealing.

It must be remembered that property values are largely dependent upon improvements. A community without efficient utility service is bound to decay, and unless relief is given hundreds of American cities and towns are deprived of the agencies which have contributed most of their development.

#### *Where Opposition Starts*

Let us analyze for a moment where the opposition to the Public Service Commission probably originates. We find considerable opposition from that small element of our citizenship who are interested in municipal ownership. The insistence of the Public Service Commission that the accounts of municipally owned plants be kept in proper form has aroused considerable opposition inasmuch as it has brought to light the fact that these municipally owned plants are not as favorable to the interests of the communities as some would have us believe. The politicians interested in fostering municipal ownership do not look with favor on any official and informed body in a position to point out the defects in their propositions.

Another phase of this opposition to the Public Service Commission is a resentment on the part of those municipal authorities in charge of water works and other utilities who have found it necessary, owing to economic conditions to increase their rates. These authorities resent having to secure the approval of a central body, feeling that it is entirely a "Home Rule" affair and an unwarranted interference with their management of the property. The managements of privately owned utilities can appreciate this feeling. It is strange, however, to find that these same municipal authorities are eager in their demand that the rates of privately owned utilities shall not be increased, and if increases must be granted that they be granted only after the most rigid investigation. It would appear that what is "sauce for the goose is not sauce for the gander."

I know that my remarks will be used by some to show that the utilities are for the Commission regulation idea, and therefore, that this regulatory principle must be against the interests of the general public. I am frank to say that the best brains in the field of utility management today along with

the leaders of thought in all fields of legitimate business and sound economies are strongly in favor of the regulatory principle as against the old system, but I absolutely refuse to concede that this means that the regulatory principle is not the best from the standpoint of the general public.

#### *Should Also Protect*

I fail to find any opposition to the regulation idea which is based on economically sound reasons. The right to regulate must carry with it the obligation to protect; and this obligation to protect is not subject to reservations or evasions. The public Service Commission of Indiana was created, and clothed with full regulatory powers, for the protection of the citizens of the state, whether those citizens be producers of utility service or users of utility service. To sacrifice the interests and rights of either class to those of the other is equally reprehensible and unjust.

Whether the utility to be regulated is an individual or a corporate creature of the state, corporation and individual are equally entitled to protection, just as the smallest user of gas or electricity or other public service is entitled to protection.

An impartial investigation of the subject will prove that taken as a whole the general public has been better served and the public interests have been more fully protected during the trying period we have just passed through than could possibly have been the case under the old system.

These facts vitally affect the business of you gentlemen and I believe it is your duty to yourselves and to the best interests of your communities to openly oppose any move which would tend to place utilities again at the mercy of petty politicians and other sinister influences.

#### **N. E. L. A. Issues Book**

The National Electric Light Association has issued a full and complete report of its forty-third convention, which was held at Pasadena, California, last May, in book form. It makes a large volume of more than eight hundred pages, cloth bound and gold stamped. It is illustrated with halftones, charts, and diagrams, gives the names and addresses of past and present officers, and will be preserved as a permanent record of the association's activities.

# How to Handle Lighting Fixtures

BY J. L. WOLF

Secretary of Lighting Fixture Dealer Society Addressed Baltimore Convention and Created Interest and Discussion by Contractor-Dealers

In talking upon this particular subject there are two sides from which it may be considered—one is the positive side, telling how a man made a success in the lighting fixture business and how to make a success in handling sales profitably; and then the negative side, what not to do.

I want to talk on what to do to make a success of lighting fixture sales, and will be glad to have a discussion of any of the points that might come to mind. After that I will be glad to point out some of the pitfalls that the contractor-dealer usually gets into in the lighting fixture business.

As an example of one who has made a success in this business, and his method of conducting it, I am going to pick out a man who went into the business five and a half years ago with a partner who put up \$10,000. This partner was in the cloak business at the time, and he tired of this business at the end of about a year and a half. He sold out to this man for \$10,000, the interest that he had paid that amount for, and at the present time this fixture dealer doesn't owe anything on that account. He has made all the money he has out of it and I might say that he has bought a home, his wife drives an automobile, he also drives one, and he makes money every year.

I am not going to take as an example his business in the last two years, because the last two years have been very good years, and almost anybody with business ingenuity could make money. I want to take the year 1918 and tell you of this man's experience in that year. With \$10,000 capital, and a business of approximately \$35,000, he told me day before yesterday that in 1918 he made \$7,500 net, after paying himself \$50 a week and paying the expenses of conducting his business.

A \$35,000 fixture business is the average amount that most contractors who go into that business are interested in, but this man is only in the fixture business; he is not in the contracting business, nor in the merchandising business. Any contractor can do this if he runs his fixture department separately. This man manages his business himself

and is the salesman. He meets his customers and in most cases sells his goods.

He has a man about forty-five years of age in his office, who sells to customers who come in when the proprietor is not in. When the proprietor is present this man takes care of the books and the telephone, occasionally unpacks the glass, possibly packs up an order, and keeps the fixtures in shape. A man of that sort receiving \$45 a



J. L. Wolf

week, is in a pleasant occupation. He is not a young fellow in his prime, of course, but I have found that if you get a man of that age in your display room, customers like to be waited on by him, and in this particular case this man waits on about a third of the customers in that store. In addition to that, this proprietor has two journeymen in his employ. Four men in his entire force, and the four of them did that \$35,000 worth of business in 1918.

## Making Profitable Connections

He originally had business entirely from carpenter contractors. When he first started there was plenty of that kind of business, but as things changed he found that he ought to have some connection with people who were wiring old houses, and he made a connection

with an electrical contractor who doesn't do fixture business. If the fixture dealer gets any wiring business, he sends it to that contractor. The fixture dealer pays to the wiring contractor twenty percent of the gross amount of the sale, and the wiring contractor carries the account. I just state that as showing the one discount, or one percentage that he pays.

In addition to that, this man has one other discount from his list price on fixtures, which is ten percent. That goes to the carpenter contractor who is a customer of his. That ten percent is for the assistance the contractor gives him in getting a customer and picking out the fixtures for him.

This particular man is up against all kinds of competition. He is in a very desirable location. Once in a while he takes a commercial job, and when he does that he goes out to dealers who handle that sort of thing, and buys the stuff with which to finish the job. That is, he doesn't carry samples of the commercial stuff. His particular line concentrates on residential goods, and I guess that is the bulk of the business that most of us do.

## Method of Pricing

It may be surprising to you to know this man's method of pricing his fixtures. He takes the cost price of the fixtures that he buys from the manufacturer and he adds to it the sockets, the wire, the labor, what it costs him to assemble it, and what it costs to handle it, and to that total of the cost he adds 166 percent. That seems an awful lot, but when you take into consideration some of those sales that he makes for some of these old houses, and pays that twenty percent, you see it doesn't leave so much after all. But he does the business, and it shows that a man by handling his business properly, can get a good market and can please his customers.

One fine thing about this man is the service to his customers that he gives them by a unique arrangement that he has adopted. Take a situation that today he has no fixtures to install, but he has orders that were sold yesterday. Those orders are immediately as-

sembled and packed up, and he carries on hand an average of \$5,000 worth of orders, complete, ready for the customer. This amount he has borrowed from the bank, and is at the present time paying seven percent for it. I think the cost to him is about \$300 a year, so as to have on hand his customer's order when the customer wants it.

His capital is not invested in that particular end of it. His capital is invested in the other end of his business—in other words, for \$300 a year he can always have the fixtures ready to send out on a moments notice, and that particular feature of handling orders does two things—it gives him an opportunity to keep his men busy uniformly. When they are not out hanging fixtures they are in the shop assembling fixtures. The second help is that when he finds something short when he is assembling fixtures, he has ample opportunity to get those things from the factory or from the jobber in time to put them in before the order is delivered. In that manner he sends the order out complete and hangs it complete, and makes a minimum of trips.

The man who hangs the fixtures has a machine of his own, and in that machine he has various things—sockets, wire, and so on. This allows him to complete the job at the time that he goes out, and in ninety percent of the times he does that. Selling the jobs that he does, and being on the job and meeting his customers, he has an opportunity to get the installation right the first time.

He also tries to be in the neighborhood where his man is hanging his fixtures the day they are being hung. If there are any bills to collect in that neighborhood he makes it convenient to go out and collect them on that day. If there are any repairs to make on any job, or if a man says that this or that is wrong when he goes to collect the bill, he gets the man who is out in that neighborhood and takes him over at a very small cost and does that work.

Another feature of this man's business, which I think is very good, is the point that he assembles very little. Most of the stuff that he gets in is all complete, ready to install, excepting the fact that it must be wired, and sockets put on.

#### *Knows His Costs*

Another feature that gives this man ample time to do the things that he

does, is the schedule of cost that he keeps, and which he uses in marking up all fixtures. Take a candle fixture, for example—two or three, or five lights—and he has decided on the schedule that it will cost to put sockets and wires in that fixture and hang it—two lights so much, three lights so much—not so much a socket, but so much on the candle fixture on the particular job.

When he gets a fixture and the shop assembles that fixture, this forty-five year old man in his store can mark up the price on that fixture by referring back to the schedule, without going to the boss about it. He simply takes the schedule and affixes the price to the fixture. Then he marks up the hundred and sixty-six percent, or whatever it may be. There are often things, taking into consideration the glassware, and so on, that have a mark up of two hundred percent. So he marks those up, and he is not afraid to get a decent profit out of all his fixtures.

#### *Works for Organization*

This man is quite an ardent association worker, and even with all these features in his business, which take so much of his time, he devotes about four hours a week to association work in the city where he is located. By devoting that much time, and getting the rest of the dealers in that particular town to think the way he is thinking, and showing them by example, what he has done, he has helped to bring the fixture business up to a higher standard, so that his competitors can make money and also bring him nearer to their prices.

He discounts all his bills, and that, too, makes a fair profit for him. There is one other feature that comes to my mind, and that is in the marking of his glass he takes the cost of it at the factory and adds twenty percent to all glass. That is the minimum amount he adds to take care of barborage, package, freight, and breakage. He takes his invoices and immediately adds twenty percent to them, and then he adds his hundred and sixty-six percent to that. That is his method of arriving at the glass selling price.

He marks his glass and fixtures separate, and then is able to change glassware from one fixture to another, to suit his customer.

To do all this he has two display rooms, approximately twelve by twelve feet, and one room, I would say, about nine feet square, with a nine foot six

ceiling, and has approximately a hundred samples.

#### *The Way Not to Do It*

I also had the case of a man, who in 1918 did a business of \$108,000 with a capital stock of \$35,000, and he made \$3,000 as a contrast to the other man that I have been telling you about.

This last man started into the fixture business in the same manner that most of you men are in it, by being a contractor and receiving orders for fixtures. He handled that fixture business by buying from the manufacturer or jobber and having his wiremen do the work. A little bit later his fixture business grew so that he could have a fixture man all the time in the busy season.

Later a dull season came along and he decided that in order to keep those workmen busy he would have them bend a few arms, if he could get them to do so, or if he couldn't he would buy some parts and assemble them or have them finished. He went through that same buying of parts, bronzes, and chains, and then imitated the manufacturers' samples as near as he could.

In this particular case one of the main reasons why he wanted to get something like the manufacturer had was because he felt that the manufacturer was charging him too much money; that the manufacturer charged him eight dollars, and he could buy the parts and put the labor into them at a cost of six dollars.

#### *Losing Money*

When he sold those fixtures with a markup of a hundred percent, the manufacturer's cost being eight dollars, he added two dollars to that for labor and sockets, making it ten dollars; he doubled it and sold it for twenty dollars: having a gross profit of ten dollars. But when he got into the business of making them himself and assembling them, getting the low cost of six dollars and adding the same two dollars, he had a cost of eight dollars, and doubling that made it sixteen dollars; so his gross profit was eight dollars. He lost out on that proposition. He lost four dollars each time he copied the design of the manufacturer.

This man continued to grow in the way that Mr. Davis spoke of here today. Mr. Davis told of a man who continues to grow, and when business is fairly good he gets up to the top, and then he is liable to go ca-fluey. And that was the situation that man was in at the

time the business boom started. His business developed. As we all know, the styles change, and so he put in a little finishing shop, and continued to add a hundred percent gross profit to whatever the total cost was.

I have found upon investigation that when a man goes into a proposition of that sort and starts to take the parts and put in a finishing plant and finish the things himself in his own plant, he immediately gets away up in the labor and material that he uses on finishing—two hundred per cent. In fact—this particular man had a labor cost of a dollar in the finishing end of his business, and a material cost of a dollar and a quarter against that labor, and at the same time possibly a hundred percent overhead in the finishing department alone.

#### *Overhead Not Counted*

When he came to sell the goods he sold them at an average markup of a hundred percent above his actual material and labor cost, not counting in the additional overhead in the finishing department that he was up against in handling cost that way. A man marking his goods at a hundred percent gets a lot of sales that there is no net profit in. In the medium class of goods he was able to get a line of business, because his price on that stuff was low.

A manufacturer would have charged off his overhead first, before he sent the stuff out to the dealer. The dealer forgot that he had a manufacturing overhead to stick into it.

On the stuff that he bought, where there was no finishing to do at all, in which he was in competition with other people who bought brush brass stuff, he was always higher in price, because the other fellows didn't mark theirs up to a hundred percent, and naturally, on the goods where he could make some money, he didn't get the volume; on the goods where he was losing money he continued to lose.

The method of handling orders was to wait until a customer wanted the goods, and then assembling them, perhaps finding that he had forgotten to order this, that, or was short of something, and didn't have the glassware, causing a lot of extra trips to be made to the jobbing house, all of which added to his overhead. I found that ten percent of his labor cost was due to making extra trips to complete jobs, for which he got no money. That was quite a bit, in a business of \$108,000.

#### *Less Business But More Profit*

Now I have stated to you a few of the pitfalls that are in the way of the man going into the fixture business. It goes to show that the man with a large volume of business and small profit is not to be compared with the man who gets better prices and does less business.

To go to the conditions as they are today. Our Association has in mind that in the fixture business we have three distinct classes of business, and neither one of them can be confused with the other one.

We have in mind a commercial business on which the prices are possibly not set, but are suggested by the manufacturer. I cite the various advertising units which you all know have prices on them, and which don't allow a markup of over fifty, or sixty, or sometimes seventy-five percent.

The other class of business is the residential business, where you buy the stuff from the manufacturer ready to wire and install, and which should have a markup of a hundred percent above the completed cost.

The other class of business is a higher class, and I speak of goods where the brackets cost around ten dollars and where the fixtures cost you twenty dollars, for which you have to get at least a hundred and fifty or a hundred and sixty percent markup on them.

I am citing those three different classes of business, so that anyone who knows about them will not be misled and take an average overhead on their whole business. We will divide their business and in marking up their prices will have three separate methods, so that whenever a customer comes in to buy goods who takes a lot of waiting on and a lot of time of the salesman, and those goods take a lot of room in your store when the styles don't move rapidly. This class of business requires a markup that will take care of the cost of doing business. When you take the medium class of business that makes up most of the volume, I believe that on a hundred percent markup you can make a fair profit.

#### *Should Know Cost*

On the commercial line up of fixtures at the present time we can't govern that because in a number of cases those particular prices are set.

I believe one thing we must bear in mind, regardless of what method we use, or what markup we have, we

should be sure to get everything in our cost.

I investigated a number of fixture dealers and I find that taking ten cost cards out of any fixture dealer's display, two of those cost cards will have some items omitted from them—something that has been forgotten, or the dealer will have some excuse why he has not changed the price of the fixture to correspond with the new cost. They seem to buy a fixture for, say ten dollars, and when the cost goes up to twelve dollars, instead of changing the price on that fixture they leave the sample hang and use the new stuff on the job, and never get around to marking those samples up.

I believe that one of the greatest pitfalls in the fixture business is not getting the right cost. A great many of the losses are due to not figuring enough cost, and I think that is as great a cause of loss as any item that enters into the fixture business.

#### **America's Troubles**

##### **Too Much of Some Things and Not Enough of Others Leaves Us Unbalanced**

That bright little publication, Graphite, says that C. E. Knoeppel, president of C. E. Knoeppel & Co., Inc., of New York, in an address on "The Future of Industrial Engineering," quoted the following

"What's the matter with America these days?

"Too many diamonds, not enough alarm clocks.

"Too many silk shirts, not enough blue flannel ones.

"Too many pointed-toed shoes and not enough square-toed ones.

"Too many serge suits and not enough overalls.

"Too much decollete and not enough aprons.

"Too much oil stock and not enough savings accounts.

"Too much envy of the results of hard work and to little desire to emulate it.

"Too many desiring short cuts to wealth and too few willing to pay the price.

"Too much of the spirit of 'get while the getting is good' and not enough of the old-fashioned Christianity.

"Too much discontent that vents itself in mere complaining and too little real effort to remedy conditions."

# Optimistic View of Supply Jobber

BY L. D. SCHIMMEL

Paper Read Before Southern New Jersey Contractor-Dealers at Camden on November 20. Mr. Schimmel is of the Schimmel Electric Company, Philadelphia

Now that the season for politics is over, the orators, whom we might call the political merchandisers, should and I hope will step aside if only for awhile and give us plain business people a chance to have our inning. For after all it is not so much what you say or even how you say it, as what you do and how you do it. This is going to become more and more the slogan as we go along in this period of readjustment until we finally reach a normal state.

As credit man—and it is my privilege and sometimes my pleasure to hold that position with the Schimmel Electric Supply Company—I can see this change coming on more clearly perhaps than some of you, because I am less a part of it than you are.

Like charity the war covered a multitude of sins. Of course I refer to commercial sins. Conditions over which no one of us had any control were such as to throw old principles and old established practices to the wind. The world was hungry for most everything obtainable. No one asked questions; everyone was eager to get all he could. Neither price nor quality was an object.

#### *Sounds Warning*

That condition of affairs is happily disappearing. The world is becoming more sober, and everyone is beginning to use a little more discretion in all his dealings. It will not be long before we are back to our former normal self.

This period of readjustment, however, is not altogether free from pitfalls and stumbling blocks. And we in the electrical line must guard against them, even as the merchants in other lines are ever on guard. It is true that in the recent decline which has been such a pronounced characteristic of many lines our line has suffered perhaps least, but then that is not altogether accidental. You must remember that the electrical line was at the very bottom of the list in the days of profiteering. Since our profits were never exorbitantly high it stands to reason that the decline could not be extremely low. Perhaps the old law

declaring that "Those who live by the sword shall perish by the sword" is still true today even as it was in the days when it was first uttered.

Truth is, we do not look forward to a great decline in prices in the electrical line. The reason for this is not very difficult to see. If you will take the trouble to analyze the material which you handle, you will notice that its cost is represented by about 90 percent of skilled labor and about 10 percent of raw material. While labor will make some concessions, it is not likely that it will come down much in the course of the next half year. In view of this, it would be folly for us to sit back and wait for material to become cheaper.

#### *Cheap Material is Expensive*

There is, however, one danger, which has become more and more eminent and against which I feel that a word of warning ought to be said. I refer to the effort on the part of some to unload cheap material in the name of reduced prices. There is no doubt we will see more of this practice in the near future.

Of course you and I know that cheap material is always more expensive in the end. There are, however, always enough of those who are taken in by the cry of cheap, cheap, to keep these cheap artists busy. We in the electrical business must be on guard against these misrepresentations more than others. For there is a greater sense of responsibility resting on the electrical contractor than on most men engaged in other lines of activity.

As a rule the manufacturer or the home owner who calls for an electrical contractor to wire his house, knows nothing as to the kind of material to be used and how the job is to be done. He trusts entirely to the honor and to the sense of responsibility of the man to whom he gives his contract. And just because the nature of the work of the electrical contractor is such, just because it is so left entirely to him, it is necessary for him constantly to keep on guard at times like these. He must not permit himself to be blinded by what on the surface seem to be attractive prices.

#### *Not Scratched Surface*

There is only one other thought that I should like to leave with you this afternoon. Electrical development in New Jersey—and that is also true of your neighboring states—is still in its infancy. It is not an exaggeration to say that we have not even as much as scratched the surface. I had hoped to be able to give you an idea of the proportional growth of electricity in New Jersey. Unfortunately I have not been able to steal away enough time from my regular work to gather these figures for you. In passing I might say that this might prove an interesting subject for a paper by one of your own men at one of your subsequent meetings.

In a general way I feel however, the electrical idea has quickly taken hold of all the people. It has become more and more popular and more and more widespread. Even if everyone of you only kept up with the normal increase which is not the result of the effort of any particular one but is bound to come as part of the natural increase, you should have a substantial increase in your business in 1921. When one adds to that the fact that there has been little or no building in the past year, a condition which cannot continue much longer he has every reason to be optimistic.

In fact I am optimistic. I believe that the year 1921 is going to be the greatest in the history of electrical development in the country. It is going to be a bigger year, a better year, a brighter year, than we have had in a long time. We the jobbers and the distributors are preparing for the coming year. It is my sincere wish that each and everyone of the members of the New Jersey Association of Electrical Contractors and Dealers will get his share of this increased business. You are entitled to it. You are welcome to it.

Learn the usefulness of the Universal Data & Sales Book by using it.

Resolve to be thrifty! Teach your children to save! Invest regularly in Government Savings Securities.

# Six Essentials to Business Success--I

BY J. E. BULLARD

The First Article of This Series Treats of Keeping Up the Morale With Enthusiasm, Confidence, and a Determination to Win Against All Odds

Whenever there is a war there is a great deal of talk about keeping up the morale. Everybody seems to know that morale has more to do about winning a war than anything else. Not so many people, however, realize how much morale has to do with business conditions and with the success of individual business concerns.

Morale, so the dictionary tells us, is the moral or mental condition as regards courage, zeal, hope, confidence and the like, used especially of a body of men engaged in a hazardous enterprise. It further goes on to emphasise the importance of morale in military operation and states that the success of great military commanders has hinged upon their ability to keep up morale.

The most casual perusal of the business failures during any year shows that all business enterprise is hazardous. A study of the career of successful business men bring out the fact that these men possess courage, zeal, hope and confidence to a marked degree. In other words their morale is high. On the other hand a study of the failures indicates that in nearly all cases the morale either of the man at the top or of his working force was low. In some cases, the morale of both is low.

Morale is just as important in business as it is in war. A business depression is always preceded by low business morale. The depression continues until business morale is increased. Those concerns who pass through such a depression with the least harm done to business volume and to profits are those most successful in keeping up morale.

### Low Morale Means Failure

When a business man becomes thoroughly discouraged he is doomed to failure. It makes very little difference how great his resources are, how good business conditions may be, how favorable all prospects may be, the low morale caused by his discouragement means ultimate failure. He can't possibly make any worth while success unless he keeps up his morale.

There is a man who began work before he had even an opportunity to secure a good common school education and who without resources or influential

friends to help him get a good start now heads a business which requires all the floors of a large building in Wall Street to house his home office force. The distinctive feature about this man and his whole working force is the high morale. There has been time after time in the career of this man when less courage, zeal, hope, confidence and the like would have spelled ruin. There have been rumors started from sources unfriendly to him that he was about to fail. Each time, however, he has weathered the storm and has finally reached a position where it is not at all likely that even unfavorable rumors will any longer be circulated. His morale and his ability to keep up the morale of those who work for him has made his steady progress upward possible.

### Indications of Low Morale

The army with low morale is one that is quick to retreat. It does not fight with enthusiasm. It is always looking for a good excuse to quit fighting and to hurry back to the rear. Such an army never gains very much ground. No matter what its numbers, no matter how great the resources back of it, the opposing army rarely meets with little if any opposition.

It is exactly the same in business. Already there are indications of low morale in certain classes of business. Instead of fighting for more business, instead of making every effort to increase sales, the dealer devotes a greater part of his time to finding excuses for poor business explaining why people do not buy. The manufacturer, instead of fighting harder to make the wholesaler and the retailer buy and sell more goods, reduces the working hours of his plant or shuts down altogether. In other words business men are retreating. Their morale is low. It does not require very unfavorable conditions when such a state of mind exists to bring on a serious business depression.

The very name depression indicates low morale. There can't possibly be a real depression unless there is low morale. If an army is always retreating, if it never puts up a really good fight, then the country and the people

back of it make less effort to support it. Rations run low and even at times do not materialize at all. Ammunition and other supplies become of poorer and poorer quality and are delivered in smaller and smaller quantities. It becomes more and more difficult to secure recruits for replacements.

Every time a business man, be he dealer, wholesaler, or manufacturer, admits defeat in his attempt to sell goods, especially if he has not made a good fight to sell them, he is doing untold harm to the industry in which he is doing business. He is breaking down the morale. People begin to buy less and less. The time comes when it is absolutely necessary to close down manufacturing plants.

### What Keeps Up Morale

During the war the morale of the American soldiers was maintained largely because they believed thoroughly in their cause and their country. They possessed courage, zeal, hope and confidence to a remarkable degree. The record they made is the best proof that can be offered of this fact. Anyone who was with the troops in France requires no proof. He was able to see for himself.

Were it possible to keep the morale of all business men up to the point where it was held in Pershing's army, no one would need to worry ever about hard times, no wage earner would need to worry about losing his job as long as he did his work satisfactorily, and there would be an increase instead of a decrease in demand. It is doubts as to ability and future possibilities that break down morale.

The man who is always enthusiastic has the best chance to succeed. His morale is always high. He is able to inspire others. He raises the general tone of the business he is in. His employes become more enthusiastic than otherwise they would. His chances for success are very greatly multiplied.

There is really no reason why every electrical contractor-dealer and every other person in the electrical business or any other for that matter should not be enthusiastic. There is no reason to be downhearted because people are no

longer buying whether one wants to sell or not.

#### Great Demand to Fill

There is still a great demand to be filled. In spite of the fact that total sales have been soaring for several years, the fact remains that in a great many cases the actual quantity of goods sold has been below normal. It has been only the dollars that have increased. There are not enough houses to go around, people are wearing old clothes and old shoes, they are economizing on food. The only things that they are buying freely are those which are being sold with the greatest persistence.

When the last census was taken nearly everyone was surprised to learn how little the population has increased during the past ten years. The number of people in the country was smaller than the number estimated in 1915. This was due to the fact that during the war immigration ceased almost altogether while the foreign born drifted back to their native countries to join their armies. It has been estimated that today there is a shortage of no less than four million people needed to do the work necessary to supply the potential demand.

This condition of affairs makes it especially easy for the dealer to make sales. Servants are scarce and of poor quality. Farm labor is almost unobtainable. The wealth of this country is greater than the present wealth of any other country in the world. It has been estimated that one-third of the wealth of the world is in the United States. This all means that there is not only an unprecedented demand for labor saving machinery and that the people have the resources with which to pay for it. In the home, in the office, in the factory, on the farm, electrical devices help solve the labor problem. It is really just a case of keeping up the morale, of going after the business hard enough to get it.

Schwab, Edison, Patterson and the other great leaders in industry would never have been able to make the success that they did had it not been for their ability to keep up morale. They have been able to get things done. Many are the stories that are told about the wonderful feats that Schwab has been able to accomplish with the men and women working under him. It was high morale that made these accomplishments possible. Out of Edison's

laboratories have come men with the courage, zeal, hope and confidence needed to do pioneer work in many branches of the electrical field. The morale of the forces working under Patterson have been kept up to the point which has made it possible to place cash registers even in the little country stores.

#### Morale That Created Big Business

In a little country village a boy purchased a little store. The opportunities for success looked very remote. There were not enough people in all the community served to permit of any very great degree of prosperity. This boy, however, possessed courage, zeal, hope and confidence. He was not easily discouraged. He believed in his business and himself. His little store succeeded. He opened other stores. He kept the morale of his working forces at a high point. Boys of ambition who came to work for him while they were in school were so inspired by his zeal and his confidence that they became his partners later. His business has continued to grow in size and in prosperity. Today his annual sales total more than five million dollars, while others who started in business at the time he did and under the same conditions, but who have not been able to keep up morale, have failed.

This business was built on morale almost exclusively. That was practically everything that this boy possessed at the start. He has always maintained it. He keeps it up throughout his organization. As a result his concern is an unqualified success.

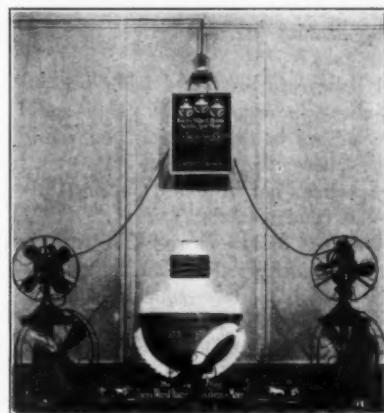
No one who has visited foreign countries and had occasion to use the telephones in those countries denies that we in this country have the very best system in the world. Everyone, however, is not aware that this is due in no small measure to the morale that Theodore N. Vail built up. Like a great general, Vail inspired his subordinates with courage, zeal, hope and confidence. When all looked darkest and hopeless he still kept up the morale and steadily kept advancing.

Without this morale the present great telephone system could not have been created. Money and materials alone could never have done it. A great leader was required, a man who never lost his zeal of hope, a man who never became discouraged, a man who always kept his confidence in his organization and the future of the business.

#### Build Morale Now

During the coming years many a contractor-dealer will feel the need of greater morale. He will have to have it in order to make the success that he should. If he has it he will succeed. If he lacks it he will fail.

Examples of great successes could be multiplied to show that this is the case, that it is morale that leads on to success and that it is the lack of morale, a low morale more than anything else, that leads to failure. A symptom of low morale is the talking about poor business and hard times. Such talk indicates a willingness to slow up and put forth less effort. It shows a lack of courage, zeal, hope and confidence. If enough people in any line of business take this attitude, business will be bad no matter what the general business conditions or the money spending power of the people may be. On the other hand, if enough people are optimistic, if they have sufficient courage, zeal, hope and confidence, business in that line is going to be prosperous, is going to be good, no matter how bad the conditions may seem to others. Trying conditions will have to be faced during the coming years but it is not the conditions that need be feared. It is rather the state of the morale of the men in the industry. Keep this up and all is bound to go well. Allow it to fall and the result cannot be satisfactory.



An Attractive Window Trim Suggestion From the Benjamin Electric Manufacturing Company

If Benjamin Franklin, the great American apostle of Thrift were living today he would say: "Work and Save. Save and Succeed. Thrift is Power." Government Savings Stamps will aid you to Franklinize.

# Labor Conditions of Today

BY MARVIN W. HANSEN

Paper Read Before Ohio State Association of Electrical Contractors and Dealers at Convention in Springfield, on November 18-19, by Well Known Contractor-Dealer of Toledo

When I received a letter from the state secretary a few days ago, requesting me to prepare a paper on the Labor Question, as to the open or closed shop—its effect on the industry in general and the electrical contractor in particular, I said to myself: "Nothing doing." Then as I reread his communication, I said: "Well, he surely gives me all the leeway possible, as he says to prepare it from the open shop or closed shop viewpoint, or from any angle, and if I did not care to take either viewpoint, then take any subject I saw fit to take, but prepare a paper and apply it to the labor question."

Thus you will observe that our astute secretary had an objective; namely, to get a rise out of yours truly, and should this humble effort be so fortunate or unfortunate, as the case may be, as to get before you it will be largely due to the great latitude that Mr. Keefer gave me.

I have therefore set out the foregoing explanation and have no apologies to offer for what is to come, as I am somewhat averse even to making an explanation, because it is my belief that explanations are of no use, inasmuch as your friends do not require them and your enemies will not believe them, so here goes.

I believe in organized labor because I believe in organization. If you did not believe in organization you would not be here; therefore you believe as I do, perhaps not in detail, but certainly in the fundamentals.

I do not believe in selfishness to the extent of hurting the other fellow. In this you will at least concur to the extent of professing it. Whether you live up to it or not is another question.

Believing as I do in organization, it naturally follows that I believe in co-operation, which is the reason for organized effort. Therefore I must go further and in lieu of selfishness to the extent of hurting the other fellow, I must grant him the privilege of organized effort, and having granted him the privilege of organized effort, and having granted him his right, I should be inconsistent indeed to refuse to recognize his organization.

Were I to face this organization single handed I would in my opinion be headstrong, to say the least; so as an organization man I should lose no time in organizing to meet him. Then when he said to me: "You must recognize my organization," I would promptly say to him: "Sure, and the same to you, sir." Our organizations will have to get together and settle all of this for us, and when the organizations are satisfied, you and I as individuals had better be.

### *Advantages of Organizing*

Let us take the net result of following this formula of meeting organization with organization. First you are sure to make a mutual settlement. You cannot expect the other fellow to draft a contract in your favor and present it to you; you must be a party to the contract before it is drafted. You cannot expect the other fellow to look out for you. As an individual you could do nothing with an organization, as that organization would have a dozen individuals or more to deal with; so it could not be expected to satisfy all. Thus many an arbitrary and unjust labor agreement has been imposed upon the employer and accepted only because the employers concerned were not organized to meet their labor organization on an equal basis.

So much for the labor agreement. Now for the economic side of the question. Should you consider it your right to deal for your labor in the open market—and right here let me make it clear to you that I grant you that right and I hope it will never be taken from you, because if that right should ever be taken from anyone, it would spell the finish of labor and of trade organizations and set commerce back in the train of progress at least fifty years.

You may ask how this is possible, and I will tell you that no organized effort can long endure without opposition; and when the individual's rights are withdrawn, then the organization becomes all powerful. Without opposition it could not long endure and would crumble of its own weight, due to the lack of the natural law of opposition.

Right here let me try to send home with you this thought: You cannot build up any organization into a powerful influence in any community unless there exists in that community a reason for the existence of that organization.

Now then if we have powerful organizations in our midst today there must have existed a reason for them. There did exist a reason or they could not be here now. The labor organization was conceived in the days of rank competition born of the law of self preservation and fed by the spoon of class hatred; and what an unruly child it has developed! Is it any wonder that it should be unruly? And what do you do with an unruly child? Take the best that is in the child and develop it.

Don't ever try to reform a child by killing it, especially when you know that to kill it only means that there will be ten more vigorous ones to take its place. If you want to curtail the fighting power of any organization of men, don't try to do it by fighting it.

Pick out the good in the institution and develop it and the good will soon outweigh the evil; for remember any organization has a lot more good in its makeup than it has evil. The process of utilization will work out a process of elimination and thereby make for the best.

### *Believes in Trusts*

Labor unions are a godsend to our industrial system; and by the same token, so are the trusts. Take it in our own business. The General Electric Company has done more to promote the electric field than any other factor. They have spent more money in the development of high efficiency lighting units than all the other interests combined. They have spent more money than any other interest in the development of the electric power field, and they have spent untold fortunes in the development of every line of electrical endeavor. They may at times step on your toes or my toes, but believe me they are largely responsible for our having shoes on our feet that we could come out of the affair with our toes not crushed.

Some of you old timers will recall that I was at one time very pronounced in my views against the Electrical Manufacturers' Association. Well, I am here today to tell you that I was all wrong. You know a man and a mule will change their minds, but a hog never will. The electrical manufacturers have done a wonderful work in development; in standardizing of material and in maintaining quality. Here is a case wherein coöperation will find a ready reciprocation, and great benefit will be derived, but if you try elimination you will only develop a fine sized opponent who will have to fight back and you will develop the evil and eliminate the good.

In my opinion things are not half so bad in the electrical field today. We have six different viewpoints to look at the industry from. The public viewpoint is of course the most important and I believe the least considered. Then you have the electrical contractor-dealer, the first step removed from the public. His viewpoint should be broad and he should never get away from the fact that he is the man the public look to. He gets the first grief.

Then comes the jobber, and he must be the buffer between the contractor-dealer and the manufacturer. He should be a step removed from the public and should reach the public through the contractor-dealer. He is essential, and the jobbers' organization is a factor that can be developed to be a great help to all.

Then comes the fourth party, the manufacturer. He should of necessity deal with the jobber more than with anyone else. Then comes the central station. The central station man is largely a missionary man, and as such he has worked wonders for all of us. He has developed a demand that the contractor-dealer, the jobbers, and the manufacturers neglected and had we not neglected it, the central station could not have successfully entered the appliance field. Think it over and see how many electrical men in your city have entered into the appliance game since the central station has paved the way.

This leads us back to the labor interest—the sixth and last interest on which all other interests depend in a greater or lesser degree. Labor is fundamentally 95% of the value of all merchandise and being 95% fundamental it is more essential that we get value

received in the purchase of labor, than in any other item. Now then it is a poor rule that does not work two ways, and you must be as willing to give as to receive. You should demand value received both ways; then all concerned will be properly compensated, and all should be satisfied.

#### Handle it Fairly

The present condition of the labor market is very critical and should be handled fairly and scientifically. We are paying for labor 100% more than we did eight years ago, and we are paying it with a dollar that has only 33% of the purchasing power that it had then. These figures will be sustained if you take the merchandise in our own line. Take twenty-five articles at random and compare the prices of eight years ago and those of today, and you will find these figures substantially correct. It will not do to cut labor before you cut other prices. In other words, the purchasing power of money must be made greater before you can expect to purchase more labor with it, and this will never be accomplished by the method that many employers are now trying to use; namely, the closing down of industry and forcing labor to come to terms that will enable capital to enjoy the benefits of the present high prices and to derive that enjoyment at the expense of the producing masses.

Therefore it is my opinion that never before in the history of the industry in which we are engaged and in fact in all other branches of industry, was it so necessary for all concerned to coöperate and to meet the other fellow half way. This can only be accomplished by the different associations working together.

This is an age of coöperation and now is the time to coöperate. Don't try to bring about the readjustment of affairs by revolution. Let's take what we have and build it up. This is no time to take things down. Let's all pull together and forget all selfishness and all revengfulness; and let's show the whole country that the electrical interests are for industrial peace and prosperity. And in closing I wish to again declare that I believe in associations and I am for them all.

Give thought to your spending. Resolve to save part of your income by regular investment in Government Savings Securities.

### This Year's Anniversary Convention

To be Held in City Where Association Was Founded, Which is Rich in Historical Events

As announced, the next annual convention of the National Association of Electrical Contractors and Dealers is to be an anniversary celebration, the original organization having been founded twenty years ago next July, the date of the annual event. Also the meeting is to take place in Buffalo, N. Y., where the first one was held in July, 1901.

No more appropriate selection could have been made for holding an anniversary celebration, for Buffalo itself, although comparatively youthful as an American city, is rich in historical facts, some of which are shown herein, as stated by Frank H. Severance, secretary of the Buffalo Historical Society.

The story of Buffalo is the story of a typical American town that owes its origin to the pioneer movement and to the development of transportation at the beginning of the 19th century. It owes its growth in the last half century, chiefly to transportation and to industrial development. The chief center of population on the Niagara frontier, it is one of the newest communities of that territory, in an historical sense. There were 150 years of French control and occupancy, but only one French Government agent and interpreter, Chabert Joncaire, is known to have lived within the limits of the present city. That was in 1758.

There was a period of settlement on Buffalo Creek, by squatters and traders from 1784 on; but it was not until 1802, when the Holland Land Company surveyed the town, that title to ownership was given and the real story of Buffalo began.

The town had developed to about 500 inhabitants when the British and Indians in the War of 1812 wiped it off the map. It started again in 1815, so that it is just to say that the present city is only 105 years old. In 1820 the mouth of Buffalo Creek was deepened and improved so that lake vessels could readily enter.

#### Commerce Began in 1825

In 1825 the Erie Canal was opened, so that freight shipments were made by water from the upper lake to seaboard. These were the two greatest events in the early history of the city.

The decade of the 30's brought the railroad. First, in 1833, a tramway from Buffalo to its ancient rival, Black Rock. This was truly the first railroad, although its cars were drawn by horses. In 1836, the road was extended to Niagara Falls, and steam locomotives were introduced. Buffalo was connected with Attica by steam railroad in 1842; but it was not until 1853 that the numerous roads which had been built under separate charters were merged into a through line from Buffalo to New York.

The telegraph reached Buffalo in 1846, the first message being sent over the wire to this city on July 3 of that year. The use of the telegraph at first was very slight, many people distrusting its accuracy. The Civil War created a demand for news, which brought the telegraph into more general use. It was not until after that war that business generally adopted the wire for its ordinary transactions.

It was in Buffalo harbor in 1842 that Samuel Dart built and operated the first grain elevator, one of Buffalo's gifts to the commerce of the world.

The village of Buffalo was incorporated in 1810. In 1832 it received its first charter as a city. In 1853 the former village of Black Rock was annexed and in 1854 what are practically the present city boundaries were established.

#### Buffalo's Growth

The growth of Buffalo in the first half century of its existence was rapid and satisfactory, considering the financial and industrial condition of the times. The panic of the 30's and the greater panic of 1857 checked progress

here as elsewhere; but in 1860, just prior to the Civil War, Buffalo had a population of 81,129.

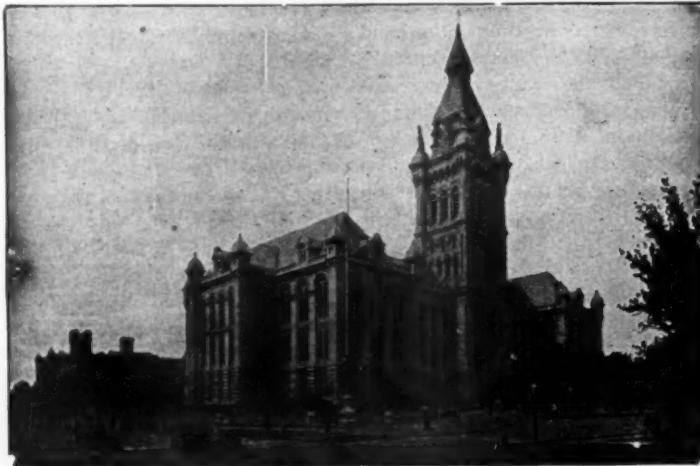
When the British burned the town in December, 1813, there were here about 100 houses, the population being computed at 500. When the Erie Canal was opened, Buffalo numbered 2,412; and in 1840, soon after the so-called Upper Canada Rebellion, which nearly plunged the United States into war with Great Britain, Buffalo had 18,213.

The next decade was the period of tremendous development of lake travel, and Buffalo profited by the great tide of emigration which built up Chicago and the West. In 1850 this city had attained a population of 42,261, which nearly doubled before the Civil War. As was to be expected, the Civil War period brought little growth. Buffalo and the other towns of Erie County gave some 15,000 men to the Northern cause. More than a third of these were recruited from the city.

According to the latest census figures Buffalo is now the twelfth city in the United States, having a population of more than half a million inhabitants.

Let's all go to Buffalo next July and look it over for ourselves. The twenty-first annual convention will open on July 20. Arrangements are now being made to fittingly celebrate this anniversary meeting. Plan to be one of the many participants.

WHEN you want information or data write the National Office. It is maintained for your use.



City Hall, Buffalo, New York

#### Show Window Lighting

**Contractor-Dealers Should Set Example For Other Merchants in Their Territory**

A report of the sub-committee on the illumination of show windows, A. L. Powell, chairman, Edison Lamp Works, and Luke Hayden, vice chairman, Brooklyn Edison Co., was recently submitted to the Lighting Sales Bureau of the National Electric Light Association. The following excerpts from this report will be interesting to the contractor-dealer:

In the lighting exhibit at the Atlantic City convention of the association, given under the auspices of the Lighting Sales Bureau and the Lamp Manufacturers, one of the exhibits which attracted considerable attention was a full sized show window with a rather elaborate installation of lighting equipment which enabled a number of features to be readily demonstrated.

The lighting effects were manipulated from a control table and automatically operated when not specially exhibited. In connection with this control board illuminated signs presented full data on the essential features of the lighting at all times. Color effects were obtained by the use of gelatin screens such as are used for theatrical spotlights. Among the features exhibited were the effects of:

*A—Variation of intensity showing the value of high intensity.*

*B—Variation of color of light including the approximate daylight, red, green, etc.*

*C—Variation of direction and distribution of light including portable stand lamps, spotlights and footlights.*

The display on exhibit was of wicker furniture and was arranged somewhat like a summer porch. The combination of lighting which seemed to give the most pleasing results with this particular display consisted of green general illumination, a low intensity of unmodified footlighting, table and floor lamps, and the overhead spotlights which were equipped with purple and orange screens, respectively.

In demonstrating the window it was pointed out that the future in show window lighting lay in the use of color effects, and that all window displays should not be treated in the same man-

ner, but each picture receive special attention.

The equipment used at Atlantic City was transferred to the New York Electrical Show and a full-sized show window constructed under the auspices of the United Electric Light and Power Company. This attracted much attention from the local merchants as well as the display men from adjoining towns.

It has been interesting to the Committee to note since the display a rather widespread use of the effects demonstrated, in various show windows of the leading stores. The time seems to be ripe for this innovation, and the use of colored show-window lighting is not confined entirely to the metropolitan district, but has been applied all over the United States.

The display man, from his training and temperament, is naturally artistic, and once having had the idea of colored lighting brought to him, he makes use of its possibilities in a remarkably artistic manner. He recognizes that the show window's purpose is to attract attention and to create a distinct impression, and proceeds to carry out this purpose in an effective, striking and yet subtle manner. As an example of the possibility of effective window displays combined with the new idea in lighting, a window was recently seen on Fifth Avenue, New York, which might be described in brief as follows:

The solitary exhibit in a particular section of the window consisted of a gigantic peacock with tail outspread. The lighting of this was accomplished by a relatively low intensity of blue illumination from footlights. Overhead, at one corner of the window, was located a standard stage spotlight so focused that it sent a spot of light approximately two feet in diameter on the tail of the bird. The combination was particularly impressive, and excited much admiration, although the layman did not realize that the special lighting was the thing which made this exhibit impress itself on his mind.

The display man spends much time in arranging his merchandise in such a manner that the completed exhibit forms a pleasing picture. He should then paint the picture with light. In art all pictures are not of the same color, the same brightness, or do not express the same thought. Neither should every show window in a store be equally bright, or lighted in the same

manner. If one glances down a group of windows in a large department store they should not all appear the same. Each display should be treated differently. For some exhibits a pinkish tint of light might be suitable, for others a deep amber, still others might require a light green, and so on. The artistic display man can readily determine just what effects he desires.

The show window is, in reality, a miniature stage, and similar methods of lighting apply. The possibilities in the way of pleasing effects are not realized by the merchant until he actually sees a demonstration.

The central station or electric shop naturally should be in the lead in any particular community in regard to lighting matters. If its show windows are equipped in such a manner that the effect of colored light can be demonstrated, they will no doubt awaken much interest on the part of the merchant in this subject. To produce a colored light, of course, means considerable absorption and hence a higher wattage required for lighting any particular area. The pleasing effect secured, however, amply repays for this additional expenditure.

It is the suggestion of your Committee that the progressive central station or electrical dealer provide means of demonstrating colored lighting to the merchants in his community by the use of his own display window.

A number of prominent electrical dealers throughout the country have already established this practice and created much interest. In one instance, a dealer in New Haven installed a three-colored lighting system in his window operated by a flash that produced constant changes, and reported that the first night it was installed it awakened such interest that traffic in the neighborhood of his store was completely blocked for some time. Some of the larger central stations in the East are planning the lighting of a typical section in each of their branch offices.

It is not necessary for a merchant to install a great deal of special wiring or multiplicity of circuits in his window to get the different effects. The wiring for the demonstration, however, will naturally be somewhat complicated, for in the case of the central station or electric shop window, it is well to have a flexible lighting system. In order that the effects may be demonstrated and attention attracted a variation

should be produced by means of a flasher. For such a demonstration window, it is well to install equipment approximately as follows:

*Overhead window reflectors.*

*One or more overhead spot-lights.*

*One circuit for base board receptacle.*

In the average store, it does not seem to be in good taste to have the lighting system varied by means of a flasher as in a demonstration window. This might be all right to attract attention, but it is not the ultimate artistic end. In the regular store, the standard equipment should be so arranged that color screens can be introduced and used; then, as the window displays are changed, the lighting can be changed and the particular effect most suitable for that individual display secured.

In addition to the regular equipment, however, it is well to have available in any department store of any considerable size, suspension type and foot-light type spotlights which can be plugged in at will and used to bring out particular objects to an especially high intensity.

## How to Use the New Business Record

Designed by National Association of Electrical Contractors and Dealers and  
Highly Recommended by Those Who Have Seen It

The man who can't afford to employ a bookkeeper has no further excuse to make for being unable to keep a record of his business transactions. He can't say that he doesn't know how to keep books—and get away with it—for if he does somebody will tell him about the new plan put out by the National Association of Electrical Contractors and Dealers.

That organization is having great success with its Standard Accounting System, but it has been found that such a method is not easily adopted to a one man business where it is customary to use the left hand trousers pocket for money paid out and the right hand side for collections. In other words, the Standard Accounting System frightens the man who carries all of his accounts in his head. He is always afraid that it is too deep for him, and that its successful operation necessitates a large organization.

However that may be, the National







the architect, in his endeavor to set his product before the public. Even the contractor-dealer's store will benefit by the advertiser's mention of fixtures and appliances.

When it is known that a page like this inserted in popular magazines costs from \$1000 to \$6000 for each insertion, the contractor-dealer should not hesitate to appropriate at least a few dollars a week regularly for his local advertising. It is not intended to make an exact comparison between the advertising of a manufacturer and a contractor-dealer, except to show that where the former expends such large sums which go toward sharing his publicity with practically all other branches of the industry, the average contractor-dealer can well afford to invest at least a part of his profits in advertising his own individual business.

The trouble seems to be that the small merchant in many of the retail lines looks upon advertising as an added expense instead of a wise investment. Rent, light, and heat are expense items, too. Advertising is as essential to the retail business and should always be considered as a necessary overhead charge.

## Hustling Electric Firms of Juneau

By W. B. STODDARD

With the abundant water power available in the vicinity of the capital city of Alaska, it is no wonder that the electric companies are thriving. The Alaska Electric Light & Power Co. has a suite of offices that would do credit to any city in the States. The main salesroom is fitted up as a reception room, and here are seen decorative lamps, washing machines, vacuum cleaners, and several cases of the smaller electric appliances, such as irons, toasters, percolators, waffle irons, etc.

"Our business," said the manager, "is limited only by our ability to secure the necessary merchandise. We specialize in vacuum cleaners and washing machines, as these relieve the housewife of the greatest drudgery. Every Wednesday and Saturday afternoon we give a special demonstration of these appliances, and are always ready to demonstrate in the prospect's home when desired.

"Another courtesy that is much appreciated by our patrons is the fact that

we take the older models of washing machines and cleaners, and allow a reasonable price for them on the purchase of later models. This gives us a number of machines which we rent at a nominal sum. These used machines are our very best sales agents—as parties who rent them soon find what labor savers they are and either purchase them outright—at reduced prices, of course—or by a later model. We sell the new machines on the deferred payment plan—ten dollars down and ten dollars a month for the washing machines; and ten dollars down and five dollars a month for the cleaners.

Occasionally we have a special sale of used apparatus, frankly advertising it as such, and at such times we sell not only the washers and cleaners, but irons, samovars, grills, and whatever we have accumulated. We make a complete inventory of all we have on hand, and list it in our regular ad, together with the date of sale. The price is reduced for one day only, and we find that our plan draws quite a number of people to our salesrooms who have not previously visited them, and while there they frequently see articles not included in the sale which strike their fancy, and thus our special sale materially assists in disposing of goods from our general stock."

The Juneau Electric Co., while maintaining a well selected stock of electrical appliances, specializes on installations and repairs. A crisp ad in the daily paper announces:

**ELECTRICAL WORK**  
See Us About It—Our Price  
is **RIGHT**.  
Everything Electrical—We  
Have It.

This firm handles bicycles as a side line, advertising them along with their electric goods:

**DON'T LET YOUR BOY  
ENVY THE OTHER  
FELLOW—GET HIM A  
BICYCLE**

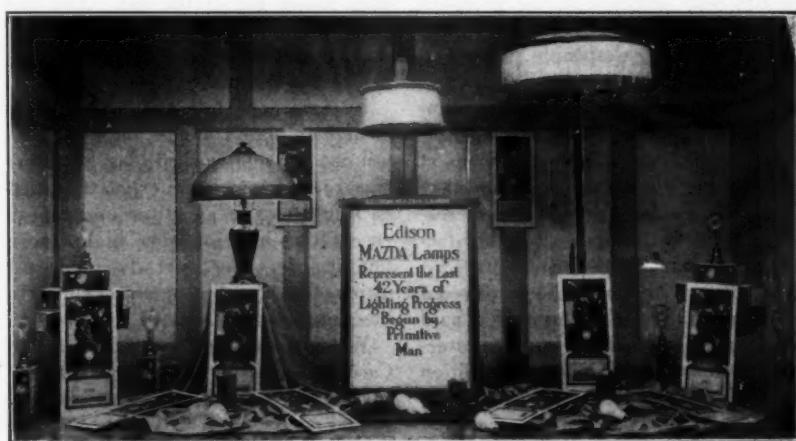
They link these bicycles and supplies with their electric merchandise, by offering to equip it with a motor and thus converting it into motorcycle. They also suggest flash lights, electric hand warmers, and head lights. In their window they show a 1920 model wheel, surrounded with the electric con—"What Electricity is to the home the Bicycle is to the boy—a convenience and labor saver unsurpassed."

The poorest argument in the world is that of the man or woman who says he is too poor to save. Poor people can't afford not to save. The Government is making it possible for every one to get ahead with 25 cent Thrift Stamps, and \$5 Savings Stamps for \$4 and a small fraction.

Too much wishbone and not enough backbone is a bad combination. It takes backbone to save; wishing won't get you anywhere, but Government Savings Stamps will if systematically purchased.

If people would talk less about saving and do more saving, they would get along better. Try it.

**IS YOUR Universal Data and  
Sales Book kept up to date?  
You need it for buying, selling  
and estimating.**



Start the New Year Right With a Calendar Display as Suggested by the Edison Lamp Works

# The Kind of a Square Deal to Give Your Employe

BY DR. NORRIS A. BRISCO

Director New York University Training School For Teachers of Retail Selling; Former Director School of Commerce, Iowa State University; Author of "Economics of Business," "Economics of Efficiency," Etc.

Much has been said and resaid concerning the "square deal" in industrial relations. To my mind the whole thing comes down to that simple biblical axiom, "Do unto others as you would have others do unto you."

It is one thing to preach and quite another to practice. You may believe in this golden rule, and you may have the best of intentions to practice it. Yet many a merchant has completely "lost out" with his employe, or his force of employes, not because he has neglected to practice the golden rule in his relations with his employes, but because he did not know how to apply it properly.

There are some who entertain the notion that higher wages will settle the whole problem. High wages will make efficient salesmen and saleswomen! High wages will create a satisfied lot of workers! High wages will increase sales and profits! High wages will do this and that!

### *Wages Depend On Conditions*

I am not now saying anything for or against the paying of high wages. Wages are governed by conditions in the labor market, by supply and demand, and by numerous other economic factors.

But the merchant who grants an increase to his employes and then smacks his lips with satisfaction that he could expect a fifty percent increase in the efficiency of his salespeople is well on the road to delusion.

Is it not a fact that bright and ambitious young men daily accept positions with commercial establishments at considerably lower salaries than they could easily have procured elsewhere.

It is evident that there are other factors than wages.

I know a young man who sacrificed a position with a small concern that paid him a handsome salary, in order to accept a similar but less paying position with a larger and more progressive establishment.

"That looks like a foolish thing to do," the young man told me, in explain-

ing his action. "But I knew that some day I would find myself in a rut. The old place paid me handsomely and the work was congenial. I sat up one night and figured it all out. My old employer was not a progressive merchant. He was not progressive enough to adopt the latest in merchandising ideas. He was content to go along in the same old way.

"I knew that his disinclination to adopt modern ideas in merchandising would ultimately affect me. In years to come I would find myself no better off than I was last year. I would go so far and no further. The establishment would not grow fast enough to suit me.

"On the other hand, my second employer, a more enterprising merchant, offered better opportunities for me. His business had made pretty rapid growth. Despite the small salary that he offered I knew that in time to come I could reach a far better position. With hard work and intelligent effort I would be advanced to some sub-executive position carrying with it a salary that I never could have expected had I remained in the old place."

It is therefore evident that there is something besides wages that attracts bright and ambitious young men to retail establishments. At the same time I am not minimizing the importance of the small retailer. Large concerns have grown out of the old. And you will find that most of the trusted and efficient executives grew up with the organization.

In days gone by a young man was content to accept a position with a retail concern and worked long hours for meagre wages with the expectation that he would receive an all around experience fitting him for some higher position in life. He generally aimed for ultimate partnership or ownership of a business.

We find such men as Rockefeller, Carnegie, and other eminently successful financiers and merchants starting life as clerks in retail stores, earning meagre wages, yet satisfied that the experience during the period of appren-

ticeship was preparing them for a future. With most ambition young men entering employment in some retailing concern the matter of salary is not a primary consideration. They want employment with progressive concerns so that they will be given the opportunity to learn progressive business methods.

Thousands of young men prefer employment in department stores, not because of any immediate high wages, but because they can see many good positions waiting for them as they learn the methods of the particular organizations.

The time has come when the small retailer must compete with the large organizations such as department stores, mail order houses, and chain stores, not only in the matter of sales, but also in the employment of efficient sales forces.

Ambitious young men and women leave the ranks of the small establishments to accept positions with the larger organizations, not to receive higher wages but to better their opportunities for advancement. They know that the opportunities for advancement are greater when the merchant is a progressive merchant, a booster, a student of business conditions, and one who is constantly expanding his organization.

### *Make Employment Attractive*

It is the duty of every retailer to make employment in his establishment as attractive as he possibly can, not only in the matter of wages, but in the matter of business experience that he can give his employes.

An ambitious young man will prefer employment in a small organization because of the all round experience that he can receive in such an organization, provided of course that the merchandising system employed by the small retailer is a strictly modern one, on a par with the organization of the large concerns.

The small merchant thereby benefit. He builds up a profitable business and at the same time he secures the good faith and the constant efforts of his employes. The Square Deal works to the advantage of all concerned.

## Electrification of Oil Fields

### New Use of Hidden Energy Fooled Wise Ones

E. L. Staley of Staley & Co., Wichita, Kansas, send an account of the electrification of local oil fields, told by the *Wichita Beacon*, from which the following is taken:

In 1915 the Kansas Gas & Electric Company bought the central station at Eldorado. The maximum load or, as the central station men call it, the "peak load" was about 125 horse power.

As soon as the purchase was made, the K. G. & E. Co. built a transmission line from the A. V. I. sub-station at Valley Center to Eldorado. This line was put in service Thanksgiving Day of that year. The line in question was built for 22,000 volts and was expected to take care of the electrical needs of Eldorado for at least ten years.

The discovery of the Eldorado oil field brought about one of the most remarkable developments ever seen in the electrical industry. And the funny part of it was that nobody dreamed that it would come about. Five years ago, if anyone had dared to suggest that more than half of the oil produced in the Eldorado field would be pumped out of the ground with motors, some of his friends would have started a subscription to buy him a one-way ticket to Ossawatomie.

Sure, this electricity was great stuff for running a fan or the wife's sewing machine, but when it came to power around a rig why the idea was simply ridiculous. Nobody could ever convince him that a man shoveling coal under a boiler located 30 miles away from the rig could ever possibly produce enough power to lift a string of 10-inch casing.

The central station would have said that the idea was entirely possible from a technical point of view. Some of the California fields had been quite extensively electrified but there they had large water power plants and could make a very low price on current.

### Had to Be Shown

But the oil fraternity are very much from Missouri and it would take time for them to learn about what could be done with the juice and how cheap it really was when you considered all such factors as upkeep and depreciation.

The extensive electrification at Eldorado was not the result of anyone's deep-laid plans or even dreams.

It was brought about by luck, chance

or a combination of circumstances, which ever you prefer.

The line built between Valley Center and Eldorado went right through the very heart of the field. Then during 1916 and 1917, the hectic period in Eldorado, oil and gas engines were scarce and deliveries were slow. One of the remarkable things about the oil industry is that time is a very vital thing.

When the average oil operator wants anything, he wants it right now. So when the operators along the line wanted water pumped or a pipe line pump driven, and no engine was available, they bought a small motor and hooked it up. During the spring and summer of 1916 all the motors, with one exception, hooked up in the field were used to drive water pipe line pumps.

The one exception was the first motor installed in the field for Robert H. Hazlett and used to drive a "power" on his farm between Eldorado and Oil Hill. The first motor was a 15 H. P. and 11 wells pumping from the shallow sand were connected to the "power." This was afterwards increased to a 35 H. P. and a total of 33 wells were pumped.

Merely to close a switch and then watch the wheels go round was a new experience to most oil field men.

When they discovered that the wheels kept right on going whether watched or not they sat up and took notice.

A. L. Derby of Wichita was the first man to be convinced that a motor would pump oil from a well a half mile deep. The motor was started about the middle of November.

Up until this time the Kansas Gas & Electric Company had merely regarded the oil field as an addition to the load in the city of Eldorado and the lines had been built from the city sub-station carrying current at 2,300 volts. This was stepped down to 440 volts by transformers installed on the various leases.

### Rush Order for Motors

Early in 1917 it was seen that there was a wonderful opportunity for the sale of current in the field. Orders for motors came in much faster than the equipments could be obtained from the factories or lines could be built.

Expressed in horse power they had a combined capacity of a little less than 11,000. A hurry-up order was sent to the factory for a turbine set having a capacity of about 13,000 horse power.

Later in the year another set was ordered rated at 20,000 horse power. This one is just now being installed and will soon be in operation. Of course this

increase in generating capacity necessitated more boilers, more building, more switchboard, more condensers and more of all miscellaneous auxiliary equipment that goes to make up a modern power plant.

Nor was this all. Orders were placed for vast quantities of pole line material and sub-station equipment of all kinds. One order was placed for 365 motors for deep well service. These were of a larger and more powerful type than had before been manufactured for similar service in California. The orders placed for motors alone during 1917 amounted to more than \$500,000.

The line from Valley Center was soon overloaded. To relieve this condition, another 22,000-volt line was built from Wichita along the Kellogg Street road to the Augusta sub-station and then a "tie-in" from that point to Eldorado.

Material was also ordered to raise the voltage on the Valley Center line to 60,000 volts. This was completed early the next year.

This year the Augusta line has been raised to 60,000 volts and a new "tie-in" built between there and the sub-station on the Porter lease. The 2,300-volt distributing lines were changed to 6,600 during the summer of 1917 and were again raised this summer, this time to 11,000. Sub-station transformers have been overloaded and replaced with larger ones until none of the original ones are in service.

### Very Expensive

All of these many changes cost a great deal of money and the officials maintain that they are financially out of breath. The race with the oil field demand has been too much for them and they must now have a breathing spell before proceeding farther.

There are now a few more than 1,100 wells connected to the lines. In horse power, the peak has increased from the 125 horse power in 1915 to about 11,000 horsepower at present, and it is still growing. Fortunately for the rest of us, the oil field peak is during the morning, and it drops off considerably before night when the lighting load comes on.

The full load rating of all the motors in the field connected to the lines at the present time is about 35,000 horse power and if the lighting load were added, it would total about 40,000 horse power.

Invest in Liberty Bonds and Victory Notes. Buy all you can afford. The current market prices make them an advantageous buy.

## Free Service Plan

Now Being Employed by Westinghouse Company Through Service Representatives

Whether the participants be two thrifty housewives trading experiences over the picket fence, or two modern cliff dwellers meeting at the doors of their apartments, or two more financially fortunate exchanging confidences over an afternoon cup of tea, the old fashioned backyard fence still symbolizes a barter of personal experiences more honest than any printed testimonial, more spontaneous than the most cunningly devised advertisement. The "Back Fence" is therefore an advertising medium in which no space can be bought save by the golden coin of satisfaction given. Satisfaction implies the keeping of all promises, the fulfillment of even implied obligations.

A national authority says, "The success of the entire electrical industry depends on service."

Modern merchandising methods call not only for selling appliances but keeping the sold. It is not enough that the device is pleasing in appearance and does well every task that is assigned to it, but it must continue to give perfect satisfaction day after day and year after year.

Bearing these thoughts in mind, the Westinghouse Electric & Manufacturing Company, in order to facilitate the giving of such service to users of its appliances and devices, has devised and put into operation a most liberal service plan which is now available to the electrical merchant. This plan affords him an excellent opportunity to increase his sales very materially at the same time it affords a service to users of Westinghouse appliances, for which the merchant is adequately compensated.

The plan consists in the appointment of certain dealers in various cities as Westinghouse Service Representatives. Only up-to-date live wire dealers who give evidence of being able to handle this work successfully are appointed. They keep on hand a stock of repair parts sufficient to enable them to make prompt repairs on all appliances brought to them; in fact the motto of the plan is "Service within Twenty-Four Hours."

The heating apparatus is guaranteed to be free from mechanical and electrical defects for a period of one year provided it is properly used on the rated voltage, and the company will re-

pair or replace defective parts under this guarantee if the appliance is returned to the service representative.

The success of the plan naturally depends largely upon the promptness with which repairs are made and this is determined by the available stock of repair parts. The selection of this stock required a careful analysis to be made of the particular territory served by the representative to ascertain the approximate distribution of appliances therein.

The manner in which the plan operates may be explained by a typical case. Mrs. A. M. Jones, of Centerville, Okla., has a toaster that does not operate properly. She sends it to the nearest service representative, the Central Electric Company of her city. Upon receipt of the toaster by the service representative, he thoroughly investigates the trouble and if in his opinion it is due to defects in workmanship or material, repairs are made and the toaster is returned to Mrs. Jones without any expense to her. The service representative then renders the company a bill for the labor involved at a predetermined sum plus the cost of the repair parts which

he charges back to the company at the same price at which they were billed to him.

Reports are made monthly by the representative to the company on special blanks furnished him for this purpose. These reports cover in detail the jobs handled under the agreement, giving name and address of the customer, article or appliance with its catalogue number, date of purchase, part supplied, the character of the trouble, and the charges for labor and material.

The plan as outlined is working out most satisfactorily not only giving prompt and efficient service to users of Westinghouse appliances but also opening up a very lucrative trade for the dealer, who not only secures the business of actual repairs for which he is assured his money, but he also has the added advantage of getting the owners of appliances in the habit of coming to and doing business with his store. If he is a good merchandiser—and no others are desired as representatives, he will see that these people become regular customers of his for other electrical devices and service.



Emil Ammann of Union Hill, N. J., is a firm believer in the effectiveness of this kind of advertising. He has contracted with a firm of window trim specialists to supply various displays, and changes every two weeks throughout the year. Many electrical contractor-dealers would be surprised to know what this costs, but Mr. Ammann says it pays and he must know, for he goes over his books every month and they tell the story.

# CONTRACTING

A Department Devoted to the Study and Discussion of the Practical Problems of Electrical Contracting

ALLAN COGGESHALL

Associate Editors

HENRY F. RICHARDSON

*(Panel Boards Continued)*

*Lighting Panels*

In determining the panel board equipment to use in any given piece of work the contractor has a wide range and variety of equipment to choose from. This is perhaps both fortunate and unfortunate. Fortunate in that the contractor is not limited in seeking the particular equipment best suited to his purpose, and unfortunate in that this wide variety tends to increase the cost of the equipment.

In some cases the contractor's choice may be confined to relatively narrow field by the requirements of a drastic

prejudiced against so called standard equipment. It is often difficult to understand why an engineer in writing a specification seems to take special pains to call for panel board equipment of a very special nature when standard construction would serve the purpose equally well.

Engineers and architects, however, are more and more tending to indicate in their specifications the general functions to be fulfilled by the electric wiring system and to leave the construction design more and more to the contractor. This tendency is creeping in because the contractor is becoming more important and better educated. When it was a question of attempting to obtain the best possible installation in the face of poor workmanship and lack of skilled workers, it seemed to be necessary for the engineer to detail out the contractor's work as far as possible.

But contractors are becoming skilled and the art of making electrical installations is no longer a brand new subject concerning which only a very few people are posted. The contractor therefore is now in a position to express himself.

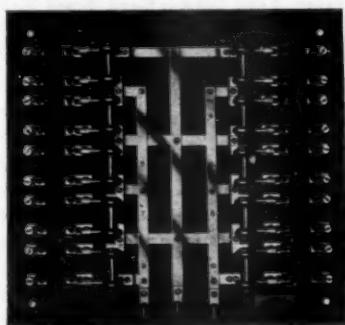
The broad gauge architects and engineers have been quick to realize this and to encourage rather than suppress this tendency. The contractor

should seek full opportunity to express himself in the construction design of any piece of work. This adds zest to the work of the contractor and also his workman.

Referring again particularly to the panel board equipment, the choice of equipment should rest fundamentally in the functions to be performed, and the particular equipment that will serve these functions best and most economically.

A lighting panel is, first, a center of distribution; second, a means of introducing protective devices in various electric circuits; and third, a means of introducing switching control so that a group of lights or outlets may be thrown on or off at will.

In many cases all three of these functions are not necessary. For example, if the switch control is adequately taken care of by local switching, the third requirement disappears, and switches, if provided in the panel, serve only the purpose of killing the circuit for replacing of fuses or for allowing alteration work to be done on the circuit wires. Switches in such a case may be very useful and even necessary, but the conditions should be carefully analyzed to determine if the expenditures for the additional equipment is justified.



Typical Knife Switch Panel With Main Lugs

specification. In many other cases, however, the contractor is asked to recommend the type of panels to be used, and always the opportunity is open to him to at least express his ideas on the subject.

Working in the direction of economy it would seem to be beneficial if the panel board manufacturers would attempt to standardize their equipment in somewhat the same manner as that lately followed by the reflector manufacturers and outlet box people. The contractor can play an important part in such a development, and after a thorough attempt has been made in this direction there will undoubtedly still remain a sufficient variety of designs to properly serve the various and particular needs of difficult installations.

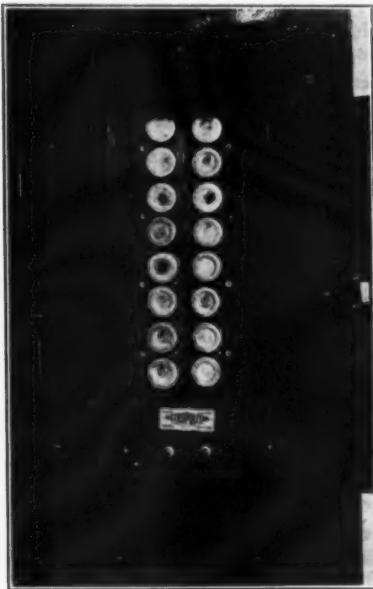
The architect and engineer can also assist in this development by being less



High Class Dead Front Panel and 30-amp. Rotary Snap Switches

The number of panels to be employed is determined by working out the logical centres of distribution, bearing in mind that the cost of panels per circuit varies as much as 25% from the largest to the smallest panel, say from 30 circuit to 4 circuit. It should also be borne in mind that it is a simple matter to buy 10-12 circuit panels than 120 circuits in 10 panels of various sizes; also the panels are interchangeable. The study of this subject is one of distribution system rather than of panels, but it has an important bearing on the panel question.

The kind of protective device to be used in the panel board circuit depends on the service to be fulfilled by the panel. That is, whether plug, link, or NEC fuse should be used, whether free access should be given to the fuses, or whether they should be under lock and



Cheaper Type Safety Panel With Fuses Only

key, etc., are questions to be answered by examining into the condition that will obtain during the probable life of the panel in service.

It is a simple matter to provide a panel that gives proper control and protection, but it is not so simple a matter to provide just the right panel at just the right and justifiable cost. When there are a considerable number of

**IS YOUR store attractive? If it is send us a description for the benefit of the other fellow.**

panels involved, these questions are important and a good many dollars can often be saved by challenging the apparent requirements and establishing as far as possible the true governing facts. That is true engineering.

Only three main functions of lighting panels have been mentioned above but there are many further matters to be analyzed in the same manner.

For example, shall porcelain cutouts or slate panels be used, shall punched clip or milled and sweated type be used? What shall be provided for the mains, lugs only, unfused or fused main switch or main fuses only? What are the requirements of containing cabinets, what gutter space, flush or surface type boxes? Shall panels be live or dead front, push button or rotary switches, any testing devices to be provided? Are any panels to be sectionalized or multi-metered, any subfeeders to be provided for, what is size of main lugs, any double lugs required? What material shall be used for slab, what for barriers, and what thickness, etc.?

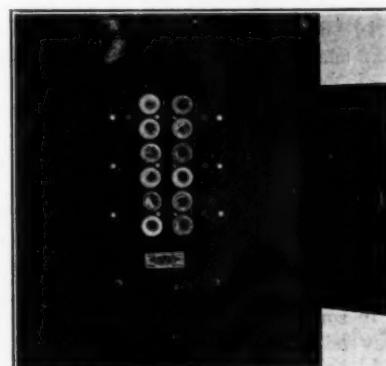
For any particular job, where the choice of panels has been somewhat narrowed down, by preliminary analysis of the subject, the matter can usually be brought to a head best by some form of tabulation. Such a tabulation should help in shaking down the panel board requirements into the smallest number of different panels, and should also aim to list the material so as to simplify the purchasing problem as much as possible.

On the subject of purchasing it is a mooted question whether the boxes should be bought independently of the panels or not. Some of the panel board manufacturers are very antagonistic to this division of purchasing, and have been known to refuse to quote on panels and boxes separately and to refuse to accept an order for panel boards only. There may be some justification for this stand when the manufacturer has an efficient box factory of his own and makes all his own boxes. But when a manufacturer has to purchase boxes from others it does not seem to be a wholly reasonable position to take.

It is often imperative that the panel boxes arrive on the job early in the proceedings and therefore to the contractor's interests to be able to control their delivery so as to work them in to the best advantage with the conduit work. If the panel board manufacturer has to put the box order through his

factory and incidently to take competitive figures from various other box making concerns it is some time before the boxes are actually started and the chance to achieve the greatest economy on the job may be lost.

Of course, in buying the boxes separately, the contractor has to assume the responsibility for all measurements, spacing and tapping of holes, etc., for later fastening the panels in place, and for this he really needs the good will of



Cheaper Type Safety Dead Front Panel and Plug Fuses on Live Side of Branch Circuit

the panel board manufacturer or very accurate knowledge of the peculiarities of the panels. Here is where the panel people could help by publishing the dimensional data of panels and by getting together on a standardized method of corner iron support and other such mechanical details.

It would seem almost as logical for the manufacturers of outlet box fittings to claim the outlet box as part of their order as for the panel board people to always claim the containing box for their equipment. The box in both cases is an essential part of the conduit system. But the makers of outlet boxes have all agreed on certain standard outlets which are identical in spacing of screws, knockouts, etc., and the panel board boxes could in a large degree be likewise standardized.

*(To Be Continued)*

Your will power determines your destiny. Make a resolution to save regularly. Invest your savings in Government Savings Securities.

**DO YOU include the Code of Practice as a part of your bid? It saves misunderstandings.**

# Improving Estimating Methods; Why and How: II

BY ARTHUR L. ABBOTT

**When Investigation and Analysis Have Been Made on all Classes of Such Work Rapid Progress Will Develop in Bringing About an Efficient System**

[This is the last installment of Mr. Abbott's series, and those who are interested in the topic are invited to send their ideas of it in the form of contributions for publication in this magazine. Comments are solicited, and should readers submit questions relating to the subject under discussion, replies will be published in succeeding issues.

—The Editor.]

The labor cost on branch circuit conduit outlet boxes is usually somewhere near 50% of the total labor cost on the entire job. This is therefore the most important single item, and it is also the item subject to the widest variations due to the variable conditions on the job.

A brief description follows of a method of arriving at labor costs on this class of work which has been developed by the cost data committee of the Minnesota State Association. This method has been in use for about two years in the offices of a number of the larger contractors in St. Paul and Minneapolis. The method is described here, not because it is believed to be a perfected system, nor because of a desire to push forward any pet theory, but because it illustrates one possible and practical method of attacking the problem.

First, all ordinary forms of building construction were classified. Then unit times for operations were tabulated for all the classes of building construction, these unit times being intended to cover the average efficiency of the workmen on an ideal job, where no additional time allowance is required on account of job conditions.

As stated in the previous installment, the job conditions which cause an increase of labor costs over those on the ideal job are classified under three heads:

1. *The size of the building.*
2. *The complexity of the installation.*
3. *The efficiency of the general contractor.*

These items are each graded on a scale of 0 to 10, 0 representing the best condition and 10 the worst. If a, b, and c are the respective grades of the three items, the effect of these conditions is summarized by the formula:

Job Factor =  $2.5a + 6 + 1.5c + 100$ , the "job factor" being the percentage of the unit times, which must be taken to allow for the conditions on the job in question.

For substitution in this formula, the value of the factor "a" is taken from the accompanying curve, the area in square feet being the area of the space which will be available for work at one time, or more accurately, the space in which work will be continuous. This will be the area of one floor in the case of built-in work in concrete floors; in the case of a frame building or any job of exposed work, the total floor area of the entire building would be used. The value of the factor "b" is taken from the "Scale of Complexity." The value of "c" must be fixed according to the judgment of the estimator.

#### Scale of Complexity:

	GRADE (VALUE OF FACTOR B.)
Small one-story store building, simple layout	0
Warehouse, simple layout	0
Factory, light and power, simple layout	1
Two or three-story store building, light and power	3
Hotel or office building, upper floors typical	4
Large apartment—large department store—large school—hospital	5
Large bank	6
Church	7
Theatre	8
Club House—large residence	10

An inspection of the formula will show that the allowance for increased labor cost due to the size of the building is 25% for the smallest building; due to complexity, the increase allowed for the most complex installation is 10% over the simplest; and the increase caused by the general contractor's inefficiency may be 15% as a maximum.

The point which it is desired to emphasize is not the merit claimed for this particular system, but rather the advantage of using a system whereby the estimator arrives at his results by a fixed and definite method of applying data. He can go back and retrace his steps at any time, can explain his process of reasoning to another party, and there is a possibility of growth and improvement in the system, because of the definite process followed. Any failure to arrive at correct results can be traced

back, the source of the error can be located, and the necessary corrections and adjustments can be made in the data or in the method.

It will be readily seen that the accuracy of any such system of estimating is fundamentally dependent upon the accurate determination of base costs, and it is the writer's belief that the development of any estimating system which is scientific—meaning thereby a system which is based on an accurate knowledge of facts, which is logical, complete and comprehensive—is impossible until base costs have been thoroughly investigated.

The base cost must in the first place be defined as applying to an operation made up of certain elementary operations which are practically fixed and invariable. In the second place it is defined as the cost of a given operation when performed by a high grade, skilled mechanic, working honestly and intelligently, and working under conditions 100% favorable to maximum production.

The Cost Data Committee of the National Association gave this whole problem very careful consideration last year and finally arrived at the conclusion that a firm of industrial engineers of recognized standing should be employed by the association to conduct an investigation of labor costs. After consultation with a representative of such a firm, it was further concluded that the first investigation should be confined to the installation of conduit and outlet boxes in one class of floor construction, and that the work should be carried on simultaneously on four different buildings. This is a new thing as applied to any of the building trades (except bricklaying) and the detailed methods would have to be worked out, but the general plan would probably be somewhat as follows:

- (1) *Complete daily records would be made of the actual work done.*
- (2) *The effect of various methods of handling the work would be studied, such as the organization of the working*

force, the completeness of the working drawings furnished, amount of work done in making up runs preliminary to installing, etc.

(3) The effect of job conditions would be studied, particularly as to time lost in starting and stopping work as compared to continuous work.

(4) Time studies would be made of such operations as locating an outlet, securing an outlet, box in place, cutting, threading and bending pipe, coupling pipe, and attaching pipe to boxes, and the percentage of unavoidable lost time would be studied.

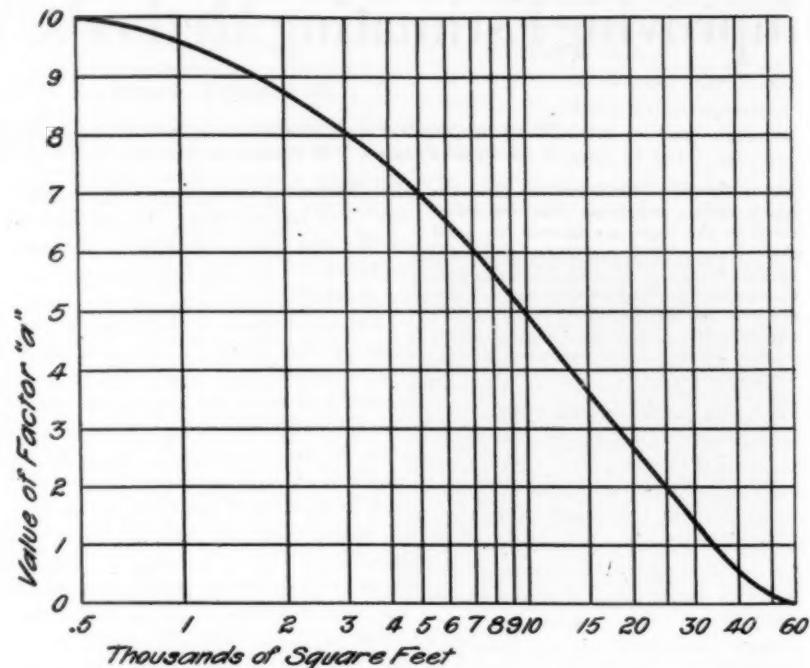
The effort throughout this work would be made to establish labor standards—to at least determine what is an ordinary average day's work for one man, in terms of certain definite operations performed under certain definite conditions. The value of such standards can hardly be overestimated. As stated above, they would form the only possible basis for a scientific estimating system.

Based upon these standards, a record system can be developed which will show, for any given period of time, the efficiency or productiveness of each man as compared to the standard, also the efficiency attained in each class of work, the unit costs and the actual loss or gain on each class of work as compared with the estimated cost.

By no means the least in importance of all the benefits of such data will be the possibility of offering a cost plus a fixed fee form of contract with a provision that the owner and the contractor shall share equally in any saving made over the standard labor costs.

The point has been raised that much work has already been done by certain contractors in collecting labor cost data, so that there is already available sufficient data for all purposes. This argument arises from a lack of a clear understanding of the shortcomings of present estimating methods and of the possibilities of improving these methods.

Practically all labor cost data which has heretofore been collected by electrical contractors has been in the form of "over-all" costs; i. e., we have discovered that a crew of men did install



in a certain number of hours, A feet of  $\frac{1}{2}$ " pipe, B feet of  $\frac{3}{4}$ " pipe, C feet of 1" pipe, and D outlet boxes. We have attempted to distribute this labor by some purely arbitrary method to the various items. We have made no attempt to analyze and classify the various conditions on the job which have a bearing on the labor costs. The result is that we have no fundamental data.

If a given job to be estimated is identical with a recorded job, we may have sufficient data for estimating the labor on the new job; if the jobs are not identical, then our data is insufficient. In mathematical language, we are required to find the value of X, which is equal to an expression containing a constant factor and a number of variable factors.

Under the old method, we refer to a record which shows only the value found for X on some previous job, more or less similar to the job we are estimating, but the record does not show the value of any of the component factors. Under the proposed method, we ascertain the value of all factors from tabulated data, and proceed in a systematic manner to compute an accurate value for X.

A careful analysis of the work of installing branch circuit pipe and boxes will show that the labor is chargeable to the following items: 1st. Installing the pipe, including only such labor as

would be necessitated by a long run without outlets, and consisting almost entirely of carrying the pipe from a stock pile and coupling length together. 2nd. Labor on the box itself, without regard to the pipe, consisting of locating the outlet, securing the fixture stud to the box, and securing the box in place. 3rd. Connecting each pipe to the box, including all additional labor on the pipe due to the outlet.

It would seem logical therefore that the estimator must be provided with the corresponding data covering each of the various classes of floor construction, and should compute his labor cost on the basis of feet of pipe, number of outlets of each kind and number and size of pipe entrances to each kind of outlet.

Accurate data as to labor on the operations mentioned can only be obtained by means of detailed studies made on the job; this data can never be obtained from over-all labor records alone.

This discussion has been confined principally to one class of work, in order to make it specific and hence more easily followed. The same method of investigation and analysis should eventually be applied to all classes of work on the typical class of jobs. When the methods of attacking the problem have once been worked out, and ideas have become crystallized as to the requisites of a real system of estimating, rapid progress can be made.

**Why?**

By A. J. HAHN

**This Electrical Engineer of Memphis, Tenn., Sees Need of Getting Together in Practice as Well as Preaching**

In one of the more recent issues of the ELECTRICAL CONTRACTOR-DEALER there appeared an editorial entitled "Analyzing a Popular Term." This article expresses in a most clear and concise phraseology the basic illness from which ninety percent of our "contracting" tribulations arise.

It is undoubtedly true that each and everyone of us is in business for the sake of the financial return directly connected therewith—but are there not other and equally as important considerations to be weighed in the scales of judgment? No seed has ever produced a better fruit than that suspended from the limb of the parent trunk. If we are to expect right and proper conclusions, our premises must be without flaw.

Our business, electrical contracting, may truly be said to be garbed in the toddling clothes of infancy—but what a precocious child it is! Only within the last three score years has the manifold benefits discarded the appellation of "luxury" and has stepped into its righteous role of "prime necessity." If the famous scientists and physicists may be termed the "Fathers" of electricity, we contractors then must most assuredly be the godfathers.

Quoting a brief sentence from the above mentioned article: "To coöperate is to work *with*—and this is performed automatically by those who are natural coöperationists."

Granting that we fall short of naturally and automatically of working together, let us not only resolve but *actually endeavor* to overcome this *mal de mer* in our business constitution.

**Too Much Variation**

In a given territory, it may be said without the fear of successful contradiction, that the differences in estimated cost of a certain definite installation will not vary more than five to eight percent. Yet bids are submitted that vary from fifty to seventy-five and even eighty percent. Often the job is awarded to the contractor whose figure is fifteen to thirty percent lower than the *average cost* of the competing firms.

Such a condition, and the above is no wild flight of the imagination, is not only unhealthy for the parties concerned, but reflects seriously upon the entire business.

Taking the elements entering into an

estimate as units, the area remaining constant, no contractor can purchase his material at such a more advantageous price than his competitor as to justify a "material" variation greater than three to four percent. The labor figure should not have any greater intrinsic variance than the above figures. Mechanics, when averaged, produce approximately the same number of "result-man-hours" per day; therefore, the labor cost cannot be the source of the oft recurring wide differences in the final bids. The only factor remaining to be considered is the "added percentage," consisting of "overhead" and "profit."

Again limiting ourselves to a prescribed territory or area, the "overhead difference of shop operation" will not vary more than five or six percent, taken on the whole, though perchance in rare instances the variation may reach eight percent. Hence at "profit" may the greater portion of the censure, if such we may term it, be aimed.

**Injures Electrical Interests**

Repeating the old adage, "There are none of us in business for our health," every fair minded business man or woman wants to see the other fellow make a fair or legitimate profit. But on the other hand, the consistent, almost illegitimate practice of "wild-cat" bidding is not only financially and morally disastrous to the party concerned, but is injurious to the entire electrical business.

The end of all paths are reached sooner or later; the policy of borrowing from Peter to pay Paul only accelerates the velocity along the downward path. If an estimate is submitted whose figure is far below the "average cost" of the other competing firms, only one of two conclusions is possible. Either a serious error has been made in the estimating of the job, which most assuredly is not the case when such wild figures are submitted consistently, or the contractor in question contemplates evading the terms of the contract.

*Why can we not get together and work in harmony—really and truly coöperate? Why cannot all estimates be based not only on the correct "cost" but on a desire to render an honest service in return for a just compensation?*

Every foot of wire installed, be it in an humble cottage or in an elaborate skytowering structure, becomes a monument to the contractor and to the busi-

ness. *Why can we not arrive on that plane of coöperation so that we may designate with pride each and every installation as a lasting testimonial to our business and to ourselves?*

**Awards Offered at Boston Exposition**

The management of the Home Beautiful exposition at Boston, Mass., working under the personal direction of Chester I. Campbell, has made such extensive plans that not one thing of essential value in or about the home has been overlooked. Mr. Campbell has managed all the large expositions that have come to Boston in the last 20 years—the Automobile show, National Textile exhibition, Shoe and Leather show, the Flower show and others—which make it certain that the Home Beautiful Exposition to be held April 16 to 30, 1921, will carry a vital personal appeal to all.

The exhibit of articles and appliances used in the modern home will be most comprehensive, and the list of exhibitors includes leading firms of the country, as well as the local houses. Their displays alone will occupy 125,000 square feet of the floor space.

A conservative estimate of the attendance allows for an average of 25,000 daily, but the management confidently expects a larger number on account of this being the first exposition to deal so closely with the everyday affairs of home life.

The money to be distributed in the competitions totals more than \$1000. The first award of \$100 is for the best plan for a house of not less than six rooms, costing not more than \$7,500 above the land. Other awards will be made for the layout for interior decoration for the house, for a model kitchen, a bathroom, laundry and playroom. Second prizes will be given, and in addition \$50 will be awarded the person who designs the best poster for the exposition.

The greatest single feature of the exposition will be an actual model house, of the design accepted as the winner of the contest. This house will be completely furnished, and will embody the best designs for decorations, kitchen, laundry, bathroom, playroom, etc. It will give a clear idea of the general exhibits of the exposition, inasmuch as it will include electrical and gas appliances, hardware, paints, heating apparatus, furnishings, and all materials used in building the home complete.



• ORGANIZATION ACTIVITIES •  
A Department Devoted to the Reports of State and Local Meetings

STATE CHAIRMEN AND SECRETARIES

State	Chairman	Secretary	State	Chairman	Secretary
ONTARIO, CANADA:	Kenneth A. McIntyre.	J. A. McKay.	MASSACHUSETTS:	Geo. B. Quincy.	J. E. Wilson.
	72 Victoria St., Toronto	110 Church St., Toronto		Boston	Summer St., Boston
BRITISH COLUMBIA:	E. Brettell.	R. H. Hargreaves, Bus. Mgr.	MICHIGAN:	Henry Roseberry.	H. J. Shaw.
	781 Granville St., Vancouver	Vancouver		41 Pearl St., Grand Rapids	613 Lincoln Bldg., Detroit
CALIFORNIA:	C. L. Chamblin.	J. W. Redpath.	MINNESOTA:	F. J. Fraser.	Roy Constantine,
	643 Call Bldg., San Francisco	643 Call Bldg., San Francisco		223 S. 6th St., Minneapolis	Builders' Exchange Bldg., Minneapolis
COLORADO:	J. Fisher.	W. A. J. Guscott.	MISSOURI:	W. J. Squire.	A. J. Burns.
	Denver	Denver		Kansas City	533 Delaware St., Kansas City
CONNECTICUT:	E. S. Francis.	Geo. M. Chapman.	NEW JERSEY:	C. R. Newman.	Geo. E. Davis.
	272 Asylum St., Hartford	43 E. Main St., Waterbury		17½ Howe Ave., Passaic	Central Ave., Newark
DISTRICT OF COL.:	Frank T. Shull.	Howard P. Foley.	NEW YORK:	M. H. Johnson.	J. P. Ryan.
	Conduit Rd. and Elliott St.	806 12th St., N. W., Washington		26 Bank Pl., Utica	26 Cortlandt St., New York City
FLORIDA:	Henry Morton	J. G. Spencer.	OHIO:	C. M. Beltzhoover.	Walter B. Keefer.
	1227 Broad St., Columbus	Palatka		4th and Plum Streets, Cincinnati	939 E. McMillan St., Cincinnati
GEORGIA:	A. B. Harris.	C. B. Anderson.	OREGON:	Roy C. Kenney.	F. R. Whittlesey.
	Gary	Walker El. & Plain. Co.		388 Burnside St., Portland	212 Henry Bldg., Portland
INDIANA:		Columbus	PENNSYLVANIA:	Fred R. Smith.	M. G. Sellers.
		A. I. Clifford.		507 Linden St., Scranton	1518 Sansom St., Philadelphia
IOWA:	Chas. H. Keller.	309 N. Illinois St., Indianapolis	TENNESSEE:	P. W. Curtis.	J. A. Fowler.
	1081 Main St., Dubuque	F. Bernick, Jr.		Chattanooga	10 S. Second St., Memphis
KANSAS:	R. M. Sutton.	208 High Ave., W., Oskaloosa	WASHINGTON:	V. S. McKenney.	Forrest E. Smith.
	125 N. Market St., Wichita	H. S. Lee.		Armour Bldg., Seattle	205 Boston Block, Seattle
LOUISIANA:	C. S. Barnes.	816 Kansas Ave., Topeka		Paul C. Burill.	H. M. Northrup.
	513 Gravier St., New Orleans	R. S. Stearnes.		140 2d St., Milwaukee	25 Erie St., Milwaukee
MARYLAND:	S. C. Blumenthal.	336 Camp St., New Orleans			
	505 N. Eutaw St., Baltimore	C. Philip Pitt.			
		15 E. Fayette St., Baltimore			

List of Local Associations and Meetings

State and City	Local Secretary	Street Address	Time of Meet.	Place of Meet.	State and City	Local Secretary	Street Address	Time of Meet.	Place of Meet.
CALIFORNIA					New Jersey				
Long Beach	A. R. Dunn	217 Syndicate Bldg.	Tues. Evening	-----	Atlantic City	F. P. Wright	16 Ohio Ave.	1st Thursday	Malta Vista Hotel
Oakland	East Bay Elec'l Trades Ass'n		Tuesdays 8 P.M.	-----	Jersey City	Wm. Doellner	743 Bergen Ave.	-----	P. S. Bldg.
Paso Robles	Mr. Castle		-----	-----	Newark	Geo. E. Davis	23 Central Ave.	1st Monday	23 Central Ave.
Sacramento	J. A. Woods	645 New Call Bldg.	Twice a month	States Cafe	Paterson	H. M. Dennis	88 Ellison St.	Last Friday	P. S. Bldg.
San Francisco	L. R. Ardonin		Sat. 12:15 P.M.		New York				
COLORADO	L. B. Roberts	227 Coronado Bldg.	Mondays 8 P.M.	227 Coronado Bldg.	Albany	E. A. Jones	31 Hudson Ave.	1st Thursday	Pekin Rest'r
Denver					Binghamton	A. H. Hyde	-----	-----	
CONNECTICUT					Brooklyn	H. W. Walcott	-----	1st & 3d Mondays 8:30 P.M.	Johnson Bldg.
Ansonia	G. M. Chapman	Waterbury	Call of Sec'y	118 Asylum St.	Buffalo	E. P. McCormick	555 Wash. St.	-----	12 Nevins St.
Hartford	H. D. Hitchcock	45 Preston St.	2d Thurs.	Dewey Hotel	Kingston	M. C. Rivenberg	Huntington		507 Elec. Bldg.
Distr. Col.		306 12th St., N. W.	ea mo., 8 p. m.	208 Realty Bldg.	Nassau-Suffolk	J. A. Palmer	White Plains		
Washington	H. P. Foley		1st Tuesday		Westchester	I. W. Austin			
Florida			each month		Watertown	L. B. Smith			
Jacksonville	W. L. Joseph	Care Satchwell & Joseph Elec. Co.	Twice a week		N. Y. Sec. No. 1	J. P. Ryan	26 Cortlandt St.	1st Thurs.	Penn's Hotel
Miami	C. E. Debrauer	Care Biscayne Elec. Sup. Co.			Independent		22 New Chamber St.	1st and 3d Wed. Evgs.	McAlpin Hotel
ILLINOIS									
Chicago	J. W. Collins	179 W. Washington St.	2nd & 4th Wednesday		Sec. No. 3	L. F. Lwedecke	260 W. 36th St.	2d & 4th Wed.	226 W. 58th St.
E. St. Louis	O. J. Birmette		Sat. 2 P.M.		Ass'd. El. Con.	H. S. Beidman		3d Thursday	Builders' Exch.
E. Moline	E. J. Bairnes		Mon. 8 P.M.		Oneonta	B. B. St. John		Mon. 6:45 P.M.	
Peru	J. Weingate				Rochester	A. Zimmerman		Subject to call	
INDIANA	C. E. Jett				Schenectady	M. R. Spangler		1st & 3d Monday	
Evanston					Syracuse	H. N. Smith		2nd Thursday	Gas Office
Gary	A. B. Harris	570 Washington St.	Wed. noon		Troy	H. W. Boudey		1st Monday	Elks' Club
Indianapolis	Geo. L. Skillman	29 S. Capitol Ave.	each week		Akron	A. Stieffvater	322 LaFayette St.		
Iowa					Cincinnati	L. C. Wall	12 S. High St.		Elec. Co.
Waterloo	J. A. Harleip	Care Waterloo Elec. Sup. Co.				W. R. Keefer	939 E. McMillan St.	Tuesdays 3 P.M.	Chamber of Commerce
KANSAS					Cleveland	Geo. D. Biery	16 1/2 High St.	1st & 3d Thurs.	Builders' Exch.
Topeka	H. S. Lee	816 Kansas Ave.	Mon. 6 P.M.		Columbus	O. A. Robbins	18 1/2 High St.	2d Wed.	
KENTUCKY					Springfield	J. R. Yost	Ermer Hopkins	2d & 4th Fri.	Builders' Exch.
Paducah	W. R. Kitterjohn		Last Thurs. of month		Youngstown	W. W. Woback	Hood Elec. Co.	Mon. 6 P.M.	New China Rest.
LOUISIANA					Portland	F. R. Whittlesey	212 Henry Bldg.	2d & 4th Monday	Cham. of Com.
New Orleans	R. S. Stearnes	336 Camp St.	1st & 3d Wed.		PENNSYLVANIA	A. H. Hill	510 W. Main St.		
MARYLAND	C. P. Pitt	Bldrs' Exch.	3d Tuesday		Bethlehem	W. T. Kleppinger			
Massachusetts					Catawissa	J. H. North		Last Thursday	
Baltimore	J. E. Wilson	263 Summer St.	3d Thursday		Erie			1st Tues.	Builders' Exch.
Boston	A. T. S. Sampson	434 Union St.	1st Mon. 4 P.M.		Lancaster	A. Deen		3rd Friday	Und'y'n'g Old Builders' Exch.
Lynn	P. A. Coghlin		2d Thursday		Philadelphia	M. G. Sellers	1518 Sansom St.	1st Tuesday	
Worcester					Pittsburgh	J. H. VanAernam	C. Gen. Elec. Co.		
Michigan					SOUTH CAROLINA	E. L. Cashion	Oliver Bldg.		
Grand Rapids					Columbia	E. C. DeBruhl	Sunter, S. C.		
Minnesota					Greenville	Ideal Elec.	Ideal Elec.		
Duluth	Alfred L. Foster	210 W. 1st St.	1st Tuesday		TEXAS	L. Thurnmond	1104 Market St.		
Missouri			each month		Chattanooga	H. M. Moses	615 Market St.		
Kansas City	L. G. Shumaker	407 E. 15th St.	Tues. Evenings		Knoxville	H. A. Street	235 Madison Av.		
St. Louis	A. J. Dunbar	Frisco Bldg.	Wed. Evening		Nashville	J. B. Muller	Arcade		
Nebraska	T. Mustain	315 Neville St.			Dallas	P. B. Seastrunk	Lepascombe Elec. Co.		
Omaha					VIRGINIA	K. D. Briggs			
					Wisconsin	H. M. Northrup	23 Erie St.	2nd Tuesday	Maryland Hotel
					CANADA	H. R. Hargreaves	Pacific Bldg.		

Associations can secure listings here by sending necessary data to the National office

## Ohio State Meeting

Held at Springfield and Attended by Electrical Men From Various Sections

The Ohio State Association of Electrical Contractors and Dealers, held its third quarterly meeting in the Arcade Hotel at Springfield, Ohio, on November 18 and 19. The two days' sessions were well attended by members from all parts of the state, and the program prepared for them made it one of the most instructive meetings the Association has held.

Three subjects dominated most of the attention, namely, "Labor Conditions," "Accounting and Knowing Your Costs," and "Present Margins on Appliances." Excellent papers were read covering each of these subjects, but some of the strongest and most instructive ideas were brought out in the very spirited and enthusiastic "round table" discussions which followed each speaker.

The labor unions' side of the labor question was very ably handled by Marvin Hansen of Toledo, in his paper on "Labor Conditions" presented at the first session of the meeting and which is printed on another page of this issue. Following the banquet that evening the "Open Shop Movement" was forcibly described by the Secretary of the Columbus Employers' Association.

"Standardized Accounting and Knowing Your Costs" was the title of the excellent paper read by C. W. Hammond, of the Avery Loeb Co., Columbus, and the discussion following this brought out ideas on overhead costs and figuring percentages which "struck home" with many of the men present. One group sat up until after midnight proving out the truth of the principles laid down by the speakers, and the next day several orders for the Standard Cost Accounting System were sent to the National Office by members who de-

termined to "know the facts" regarding their own business.

One of the best papers presented was by L. E. Trotter, of the Post-Glover Electric Co., Cincinnati, on the subject "Are the Present Margins on Appliances Profitable"? Mr. Trotter showed very clearly the grave danger of a setback in electrical merchandising which will occur unless adequate differentials are established for the dealers. The keen discussion which followed his paper showed the widespread interest in this subject in every locality, and the figures presented by various dealers present showed the recent report made



Headliners at the Ohio State Convention, from left to right, L. E. Trotter of the Post-Glover Electric Co., Cincinnati; Secretary J. L. Wolf, Lighting Fixture Dealers' Society; Chairman Beltzhoover and Secretary Keefer; Marvin Hansen, Toledo

Such meetings as this are well worth while and every member of the State Association should mark his calendar long in advance with a determination to attend the next one. They are an investment which will pay real dividends into the business.



Special Representative "Larry" Davis and Secretary J. L. Wolf of the Lighting Fixture Dealers' Society, comparing notes on organization activities

by the National Association to be a very conservative statement of conditions in the merchandizing field.

Special Representative Laurence W. Davis, was present through the meetings from the National Headquarters, and gave a report on the National Convention at Baltimore and a brief survey of the work of the National Association. He secured eight new members between sessions and was informed that Youngstown would send in ten new applicants at once.

A story of the convention would not be complete without special mention of the banquet arranged by the Springfield committee, at which "roast rabbit" was the "piece de resistance," bountifully supported by all the fixin's, and ending with an ice which was a work of art.



Some of the Delegates Who Attended the Quarterly Convention of the Ohio State Association of Electrical Contractors and Dealers at Springfield

## Indiana's Great Convention

Annual Meeting of State Association of Electrical Contractors and Dealers Sets New Mark for Hoosier State

The story of the annual convention of the Indiana State Association of Electrical Contractors and Dealers, held at the Oliver Hotel, in South Bend, on December 1 and 2, cannot be told in a simple recital of the program. The great enthusiasm shown from the welcoming address of South Bend's mayor at the opening session on the first day, until the delegates left after the second day of royal entertainment as guests of the city's greatest industrial concern, the Studebaker Plants, and the intense interest with which the splendid addresses of the speakers were received, can only be appreciated by going back twelve months to get a perspective from Indiana's last convention.

A year ago the Indiana State Association had 28 members, (of whom 27 were "on the fence.") During the following months, however, the state officers, led by A. B. Harris, of Gary, as chairman, started a new spirit of co-operation, which has spread with a contagion of health, until city by city—Fort Wayne, South Bend, Evansville—every part of the state, has awakened and tackled their problems of better relationships and obligations toward one another and the rest of the electrical industry. In each of those cities named, and in many smaller ones, membership is 100% strong in the association, while every section is working to bring about mutual co-operation,

that better service may be rendered the public and sounder business relationships result for all.

Today the Indiana State Association has a membership of 106, with their faces turned towards twice that number as their next goal, and vitally important work planned and made possible because of it.

Over one hundred and fifty registered for the first day of the convention, sessions and every seat during all the meetings was occupied, with often many men standing. The meeting opened with an introduction by H. C. Moore, of Mishawaka, chairman of the St. Joseph County Association, who were the hosts of the convention; followed by a cordial welcome by Mayor Franklin R. Carson of South Bend, who extended the "freedom of the city." The convention was then formally turned over to State Chairman A. B. Harris.

The first address upon "Credit", by Alfred E. Martin, attorney for the Citizens' National Bank of South Bend, immediately placed the program upon an unusually high plane of quality and forcefulness in subject and presentation, and that plane was held by every succeeding speaker.

Mr. Martin is a deep student of finance and credit, with long practical experience, and presented his message with a powerful logic and a gift of oratory which held every listener. He emphasized the importance of accurate, constant knowledge of one's business, and laid down three cardinal principles upon which all credit must be based: Accuracy of business statements; frank and complete exhibit of business conditions to one's banker, or creditor; and prompt attention to maturing obligations.

The next speaker, Morse DellPlain, vice president of the Northern Indiana Gas & Electric Company from Hammond, presented a paper on "The Contractor-Dealer and the Central Station". This paper is printed in another part of this issue. The message delivered is one which should demand the instant and serious attention of every contractor-dealer throughout the country today—the imperative need of awakening the public to a realization that future development of every American city or community is dependent upon safeguarding the public utilities of the country, and that the present political "restrictions" of utilities is so stifling every possibility of financing the nec-

essary developments in equipment and plants that already utilities are near the breaking point in ability to meet the tremendous demands.

This same message was delivered to several hundred South Bend business men at the noon luncheon of their Rotary Club, by W. L. Goodwin, in one of those powerful addresses of which only "Bill" is capable. Again at the convention banquet in the evening the importance of the condition was forced home to every contractor-dealer and guest present by the impressive statement of Mr. Bryan, general manager of the Indiana & Michigan Electric Co., as to the critical need of their company for relief from a situation which limits their earnings to 7%, when money vitally needed for power development can only be had at rates from 7% to 9%. Even could capital be induced to come forward for such investments at 7%, leaving nothing for common stockholders, such capital does not begin to earn anything for periods of from two to four years, the time needed to complete the great extensions for future certain demands.

The importance of this to the contractor-dealer needs no emphasis—any curtailment of central station development means immediate and equal curtailment of his business. Already in many parts of the country this is felt, where overloaded lines forbid the sale of heating devices and extension of lines or additional transformers are impossible.

The remedy lies only in a nationwide awakening of the public to the certainty of this paralyzing all industrial and civic growth; the imperative need of removing the regulation of public utilities from political gamesters, and of basing the regulation upon economic laws which will protect the true interests of the public.

In this the contractor-dealer can and must have an important part in moulding public opinion toward the utilities and the real facts of the case. In his profession he occupies a unique position of intimate contact with the public and in most cases his opinion is listened to with the respect due experts. Every interest of contractor-dealers demands that they use this position to create good will and understanding from the public towards utilities.

There is another side of the question which should hold the serious attention of every contractor-dealer and cause him to realize the remarkable develop-

ment in co-operation and mutual dependence of the various branches of his industry during the past few years. It is a unique distinction which the contractor-dealer holds today when the central stations of the country lay before him such a serious problem and ask him to help them solve it. It is up to every contractor-dealer to prove worthy of this confidence and give every assistance within his power.

At this Indiana Convention a resolution was passed unanimously supporting the movement for relief for the utilities of Indiana through awakening public interest and legislative steps.

The afternoon program of the convention carried four strong addresses. The first was a practical paper on "Electrical Contracting", by A. L. Swanson of Evansville, which drove home in language every man understood many of the fundamentals of contracting success. Mr. Swanson's talk was prefaced by the reading of a "contract" addressed to the Goodwin-Chase Co., in which he proposed to install a complete lighting system in their store for \$98.40; but as usual in submitting estimates, he showed where they could cut out enough outlets and receptacles to reduce the bid \$34, and then he asked permission to refigure the job if his price was not low enough. It was a clever take off on what seems to be the regular practice of submitting estimates in the contracting business; and as Mr. Swanson showed, such a custom does untold harm to those engaged in electrical contracting.

The next speaker was W. D. Yates of the General Electric Co., from Chicago, who gave a talk on "Standardization". He carried the audience back to the early days when there were over three hundred different types of bases for incandescent lamps, none interchangeable, easily picturing the chaos such a condition would mean today, and then showed how equally unprogressive the industry is which permits 37 different non-interchangeable types of plugs and receptacles today, and many other such obstacles in the way of satisfactory handling by dealers or buying and using by the public. He urged all dealers to refuse to handle all types of non-standard plugs, receptacles and attachments, thus compelling standardization by manufacturers.

The next address on "Advertising", given by A. A. Gray, advertising specialist of Chicago, was not only a convincing presentation of the need for

more intelligent use of advertising by the contractor-dealers, but was presented with the delightful style and skill as an orator with which Mr. Gray handles every subject, and won for him instant interest and approval.

Following a suggestion made by W. L. Goodwin, a resolution was passed advocating the adoption by electrical manufacturers of a plan for an additional allowance on all electrical appliances, independent of existing discounts, to cover 50% of all money spent by dealers in local advertising, the advertising invoice and copy of display to be evidence of such expenditure, and the amount to be applied as payment on account of purchases; proper arrangements being made with jobbers to permit this.

The last speaker on the program was Laurence W. Davis, special representative of the National Association of Electrical Contractors and Dealers. Mr. Davis announced the great strides which Indiana had taken in state organization, in keeping with the equally fine growth of the National body, and pointed out the effects already resulting from this spirit of co-operation in the Indiana cities he had visited. He emphasized the big tasks still to be done, both in their state, and nationally, and urged that every member feel individual responsibility in the obligations and opportunities now facing them. His story of the work of the National Association, both in the past and in plans for the future, was followed with great interest, particularly the announcement of the new type of Simplified Business Record and the rapid introduction of the Standard Cost Accounting system, and the importance of such better records in every relation with the electrical industry.

The day's sessions closed with the election of officers for the ensuing year, and routine business. The following State Executive Committeemen were elected: A. B. Harris of Gary for the northern district; Tom Hatfield of Indianapolis for the central district, and A. L. Swanson of Evansville for the southern division. A. B. Harris was reelected chairman, and A. I. Clifford, of Indianapolis, was elected Secretary and Treasurer, succeeding George L. Skillman, who has given years of splendid service as Secretary in the past.

In the evening a banquet was served, with over 200 at the tables. An orchestra, a male quartette, and a talented lo-

cal comedian provided entertainment during and after the meal, and were much appreciated.

W. L. Goodwin was the principal speaker of the evening, and as always, held the intense interest of his audience. He illustrated by graphic formulas the importance of merchandise turnover and collection of accounts receivable as vital factors affecting profits, and emphasized a need of careful study of such principles in the contractor-dealers' business in considering the relationship of discounts to overhead costs of business.

Mr. Goodwin closed his talk by announcing his retirement on January 1st from the work he has been engaged in at great personal sacrifice for the interests of the electrical industries, during the past few years. He stated he would devote his energies to a company he is organizing to fill a commercial need he feels exists in the electrical industry, both among individual firms, communities, and the industrial branches—the diagnosis and cure of business ills.

The second day of the convention was entirely one of entertainment—a trip to the University of Notre Dame in the morning, luncheon at the Studebaker Plant as guests of President A. R. Erskine, and a trip of inspection through the plants in the afternoon.

Unfortunately, cloudy weather and a rule of the hotel forbidding flashlights, prevented the securing of photographs of this most enthusiastic group of electrical men at their annual convention in the Hoosier state.

### New Jersey Meeting

#### Large Number in Attendance Listen to Interesting Talks by Electrical Men

The quarterly meeting of the Executive Committee of the New Jersey State Association which was held at the Y. M. C. A. in Camden, N. J., on November 20, was made the background for a meeting of the contractor-dealers throughout Southern New Jersey and was largely attended. Arrangements for the meeting were in charge of John C. Plaskett of Camden, who opened the business session with an address of welcome and then turned the meeting over to Charles R. Newman of Passaic, chairman of the State Association.

Mr. Kelly, municipal inspector of Camden, spoke as a representative of the mayor and welcomed those in attendance to the city and afterwards

described briefly the methods of handling inspections and licenses in Camden.

Charles Harbison, chief inspector for the Public Service Co. of New Jersey, explained the new regulation in regard to service devices and exhibited these devices to the meeting.

Mr. Nicholas, of the Square D Co. of Detroit, gave a strong talk urging the contractors to do quality work and to build up good will in their business in this way.

Frank H. Stewart, of the F. H. Stewart Electric Co. of Philadelphia, talked on the subjects of overhead and margin of profits and demonstrated clearly the necessity of keeping a close watch on these items of business at all times.

M. G. Sellers, secretary of the Pennsylvania Association, outlined briefly the work that organization is doing throughout the state and in the city of Philadelphia.

M. C. Turpin, of the Westinghouse Merchandising Bureau, gave an interesting talk on the subject of merchandising and impressed on the contractor-dealers their responsibility of properly carrying on a public meeting.

L. D. Schimmel, of the Schimmel Electric Co. of Philadelphia, spoke on general business conditions and his paper is published on another page of this issue.

Ward Wilkins, of the Partrick & Wilkins Co. of Philadelphia, gave a touch of optimism to the meeting by relating his personal experiences in the business for many years and pointing out the tremendous improvement that has been made by the contractor-dealer.

W. H. Morton, general manager of the National Association, described the work of that organization and pointed out the vital necessity of active support to the National Association by the state organization, the local organization, and the individual member, not only by the payment of dues, but also by giving some time and assistance in the work that is being carried on.

After the general session the State Executive Committee held its regular meeting. One of the interesting features of the South Jersey meeting was the personally conducted "speakers' special" in charge of George E. Davis, secretary of the State Association, which through Mr. Davis' skillful management, took four hours to go from New York to Camden and covered a

large portion of the state of New Jersey in doing this.

As a result of this unique trip we understand that Mr. Davis will have charge of the transportation of the New Jersey members to the coming Buffalo Convention and he will probably take them from some central point in the state up to Poughkeepsie so that they can take the boat to Albany and from Albany take the Erie Canal to Buffalo. This will undoubtedly be interesting; but we advise the New Jersey members to prepare for a two weeks' outing if they are left in charge of their genial State Secretary.

## Meeting of Metropolitan District

### Lighting Demonstration Enjoyed by Large Number in Attendance

There was an interesting meeting of the Metropolitan District, New York State Association of Electrical Contractors and Dealers, held in the auditorium of the New York Edison Company on Wednesday evening, December 8. George E. Wheeler, president of the Metropolitan District, presided.

Mr. Wheeler announced that as the Edison auditorium had been fitted up for the purpose of affording a per-

manent place for the lighting demonstration such as was given at the Baltimore Convention and as is now making the rounds of the country, an exhibition would be part of the evening's program. But first he called upon a representative of the Brooklyn Edison Company, M. S. Seelman to make a few remarks.

Mr. Seelman assured his audience that his company was endeavoring by every possible means to coöperate with the contractor-dealers and other electrical interests for the betterment of the industry; but that for good and sufficient reasons the process had been slow; however, results were now be-



This illustration, presented through the courtesy of Electrical Merchandising, shows the Baltimore Convention Lighting Demonstration. Note the various kinds of ceiling fixtures, which are the same as those installed in the Edison Auditorium, New York City, and other exhibits that are now being shown in various sections of the country. Contractor-Dealers are urged to attend these lighting demonstrations.

ginning to show, and in the near future he felt that all parties concerned would be entirely satisfied.

Mr. Seelman announced that his company had divided the Brooklyn territory into seven separate zones, and that a directory of the streets showing locations of these districts would be distributed to contractors. This would make it easier for contractors to deal with the company as it is no longer necessary for them to go to the central office, all branch offices being equipped to attend to the wants of each district.

A. S. Turner, Jr., of the Edison Lamp Works, Harrison, N. J., was then introduced and held the attention of the audience in an able demonstration of modern lighting. Every conceivable phase of the subject was treated, from the old fashioned drop cord style with dirty lamps and makeshift shades, up to modern fittings with RLM reflectors giving an intensity of 20 or 30 candles, and augmented by additional equipment that ran beyond the power of measurement of the foot candle meters that were on various tables in the audience.

Mr. Turner's demonstration should convince contractors that they must give careful thought to the lighting proposition. He showed that the cost of proper industrial lighting is so small when compared to the factory payroll that when it is demonstrated that it increases productivity 20 or 30 percent, the cost is not to be considered. He said the contractors should advocate high intensities—at least 10 or 15 candles—and demonstrated to prospects the actual value of proper lighting as an investment.

Walter Nuemiller of the New York Edison Company then made a pleasing talk on the advantages of better lighting, calling attention to its invigorating effects, and urged those that are interested in things electrical—contractor-dealers, manufacturers, central stations, and others, to help spread the gospel of efficient lighting.

Wm. L. Goodwin was then introduced by Chairman Wheeler, and in his usual vigorous manner he advised his hearers to make the lighting demonstration which they just had witnessed a starting point for prolonged activities along those lines. He cited a number of instances where it was shown that those who should be familiar with the subject of lighting had displayed the grossest ignorance; and he said he

hoped that those interested would realize the advantage of having a permanent display where those who so sorely need it can be educated in efficient methods of lighting.

Mr. Goodwin also made a strong plea for central stations and public utilities in general, showing that at present they are working under the most trying conditions in endeavoring to supply the public needs at a scale of prices which allows them less on their investment than can be made in any other line. He urged the contractors to help their own interests, to work with the central stations, and to invest at least a small amount in such companies for mutual good and as an example to the public.

It is being arranged to hold future meetings of this nature at the Edison auditorium, which is located on West 27th Street near 6th Avenue in New York City, and endeavor to demonstrate the necessity of a better knowledge of lighting in the electrical trades.

## Goodwin-Chase Meetings in South

### Large and Enthusiastic Gatherings Greet the Good Will Promoters

Another visit to the South has recently been made by those tireless workers for good, Wm. L. Goodwin and Samuel Adams Chase, with the usual result of a more friendly feeling by all interests.

It seems too bad that a more extended report cannot be had of these interesting meetings, but nobody seems to care whether or not the rest of the world knows of their accomplishments, and in the absence of a ouija board the editor must use his occult talents to even mention the high spots.

On Friday evening, November 19, the contractor-dealers held a Goodwin-Chase meeting at Miami, Florida, which was attended by 130 electrical men, including jobbers' and manufacturers' representatives.

At the Hotel Mason, Jacksonville, Florida, on November 20, a banquet was tendered Mr. Chase and Mr. Goodwin, who both made addresses. Also Mr. Hill of Doubleday-Hill Electric Co., Pittsburgh, Pa. and Washington, D. C., made an interesting talk and told of the many beneficial results of the Goodwin Plan.

On Monday, Nov. 22, meetings were held both morning and afternoon at

Raleigh, N. C. A banquet was held in the evening, attended by 170 contractor-dealers, central station, and jobber representatives.

## Philadelphia Electric Club Holds Meeting

No one is a bolshevist or a communist or a socialist at heart, George Wilder Cartwright, former State Senator in California, told an audience of electrical workers and their employers at a mass meeting in the Academy of Music, Wednesday, December 1. The meeting was held by the Electric Club of Philadelphia, which was joined by the industrial relations committee of the Philadelphia Chamber of Commerce.

M. Edwin Arnold, president of the Electric Club, opened the meeting by presenting as chairman Ernest T. Trigg, chairman of the industrial relations committee of the Philadelphia Chamber of Commerce.

After Mr. Cartwright had sent broadsides of logic into the illogical arguments and doctrines of these radical groups for more than an hour and a half the audience that filled the large auditorium unanimously adopted resolutions pledging themselves to work hand in hand—employer and employee—in solving the problems brought about by present industrial conditions.

Richard Spillane, business editor of the PUBLIC LEDGER, was another speaker. He urged coöperation between employer and employee. He said that these groups must work much under the slogan, "Bear and forbear!" He said that there are none of the problems of the day that cannot be worked out by commonsense planning done jointly by the employer and employee.

Mr. Cartwright ridiculed the arguments of the Reds that the ills of the country are caused largely by 1 percent of the people owning 99 percent of the wealth, and declared that it is an untrue statement.

## Will Hold Electrical Show

The Elmira Electrical Association of Elmira, New York, announces the first annual electrical show to be held in that city on January 22 to 29, inclusive. H. S. Bryan, 210 East Water Street, Elmira, N. Y., is the general manager.

Get the most out of tomorrow by resolving today to invest regularly in Government Savings Securities.

## To Meet at Davenport, Iowa

What promises to be the most successful meeting in the history of the Iowa State Electrical Contractors and Dealers' association will be held at Davenport the latter part of January. Davenport was awarded the meeting at the session held at Waterloo in November. Numerous cities of the state sought the convention.

Plans for the meeting were discussed at a session of the local electrical dealers at the Davenport Commercial club, last month. It was decided to surpass former programs at Des Moines, Sioux City and Waterloo, if possible.

Louis Corry was named chairman of the general committee on arrangements, F. Thos. Turner, secretary, and R. L. Stiles, treasurer. E. Kunkel will be in charge of the program and F. E. Downing in charge of entertainment.

## N. E. L. A. Section Meeting

### Large Attendance at Miami, Florida, for Eighth Annual Gathering

The Southeastern section of the National Electric Light Association held its eighth annual convention at Miami, Florida, Nov. 16 to 19, with a large attendance from the various states in that territory.

At the opening session J. J. Gibson, manager of the Westinghouse Supply Department, talked on industrial topics, and M. H. Aylesworth, executive manager of the N. E. L. A., talked on the progress of the organization.

Samuel Adams Chase and Wm. L. Goodwin also addressed the convention at one of its business sessions, delivering their messages of good will and advocating further coördination in the various branches of the industry.

Among the features of entertainment enjoyed by the delegates and their guests were automobile tours, surf bathing at Miami Beach, dancing at the Hotel Urmey, and a trip to Bimini Island and of the British Bahamas, where fishing and boating were indulged in by all.

At the closing business session on Thursday, November 18, the following were elected as officers of the Southeastern Section of the National Electric Light Association: President, S. B. Ireland, Montgomery, Alabama; First Vice President, D. A. Cheney, Orlando, Florida; Second Vice President, F. D. Mahoney, Birmingham, Alabama; Third Vice President, G. E. Watts, Atlanta, Georgia.

Executive Committee: C. D. Flanigan, Atlanta, Ga.; W. R. Summers, Knoxville, Tenn.; R. S. Lindsey, Durham, North Carolina; H. A. Orr, Anderson, South Carolina; F. E. Fletcher, Tampa, Florida; L. L. Newman, Birmingham, Alabama; H. A. Cole, Atlanta, Georgia; E. H. Ginn, Atlanta, Georgia.

## Supply Jobbers Convene

At the Convention of the Electrical Supply Jobbers' Association held in Cleveland, Ohio, Nov. 17-19, F. H. Goff, president of the Cleveland Trust Company, delivered an optimistic speech before the gathering in which he made the prediction that early Spring would find business conditions to be in an almost normal state.

The convention sessions were all largely attended and interesting talks were made by F. H. Thomas, St. Paul; A. A. Gray, advertising counsel, Chicago; M. C. Turpin, Westinghouse Merchandising Bureau, New York; J. A. Corcoran of the General Electric Co.; E. B. Seitz, secretary of the American Association of Washing Machine Manufacturers, and others.

The next meeting of the jobbers will be held at Hot Springs, Virginia, on May 25-27.

## Paying the Price

### Enthusiastic Admirer Grets Bill Goodwin With a Special Sale

Timely advertising is exemplified in the following self explanatory copy released by the Walker Electric Company, Raleigh, N. C. Mr. Goodwin's aversion to special sales could not have been known to the writer of this copy:

#### GOODWIN DAY

*Mr. Wm. L. Goodwin, known to Electrical Men as Bill Goodwin, is to be entertained at the Woman's Club here Monday, November 22. In commemoration of the event we are going to sell Portable Lamps Which are priced from \$15 to \$20 at \$10 each. And all other articles in our store 20% Discount. Remember the day—Monday and the place—108 W. Martin Street Walker Electric Store.*

*(This will cost us \$100, but we would stand \$100 of expense to hear Bill Goodwin.)*

## Meetings in Toronto

On Thursday, January 6, will be held the annual meeting of the Ontario Association of Electrical Contractors and Dealers.

The annual report will be submitted and Toronto district officers for 1921 will be elected.

Professor W. H. Price of the University of Toronto will speak on "Motors—Their Characteristics and Applications". A non-technical talk on fundamental facts we all should know.

At next month's meeting, February 3, W. H. Morton, secretary-treasurer and general manager of the National Association of Electrical Contractors and Dealers, is coming from New York to talk on "The Work of the National Association"—K. A. McIntyre, Chairman.

## Social Evening at Newark, N. J.

George E. Davis, secretary of the New Jersey State Association, sends the following account of a social evening indulged in by the local organization of Newark:

It was the first affair of the kind that the Newark boys have ever held, and it certainly did them credit; they all worked hard and the result showed for itself. There were 125 present of whom 50 were ladies. The dinner started at 8 o'clock, and Achtel-Steter furnished a very good menu. We do not know what we ate, as you will notice by the following menu, but it tasted very good:

Flashlight Cocktail; Bell Staple Soup; Pencil Zinks; Ball Cord Adjusters; New Meter Device; Nokorode Sauce; Ground Clamps; 14 B. X. Cable; Overhead Sauce; Fuse Plugs; Split Knobs French Fried; 20-25 Percent Salad; Secondary Ground Wire; 3" Porcelain Covers; Meter Board Paint; Approved by the National Board of Fire Underwriters.

The arrangement of the banquet was very unique, in that instead of the usual straight line tables, we were seated at family tables of eight, with the exception of the men who did not bring their wives or sweethearts, and they were lined up in a straight line of tables on the side of the hall, where they were very conspicuous on account of their lonesomeness.

After the supper we had a short entertainment, which concluded with sketches by professional entertainers, and at 10:30 we started dancing which

lasted until the wee small hours of the morning.

The affair was such a success, that those present requested that the entertainment committee have a similar affair on Washington's birthday.

The dancing card included the following numbers: Knob and Tube Fox Trot; Bell Wire One Step; Direct Current Fox Trot; 60 Cycle Waltz; and similar dances.

The entertainment committee was composed of Elmer D. Wilson, chairman; C. H. Butler, F. I. Marsh, J. C. Erbach, and W. E. Burchell. H. C. Heidrich is president of the local association.

### Get Together Dinner Planned for Boston

At a meeting of representatives of the electrical trades at the Boston City Club, Thursday, November 30, 1920, there gathered together thirty-eight gentlemen representing manufacturers, central stations, jobbers, and contractor-dealers, to make preliminary arrangements for an electrical trades dinner to be held at the Boston City Club, January 26, 1921.

Bowen Tufts, president of the New England Section of the N. E. L. A., has been chosen chairman; W. F. Abely of the Western Electric Company, secretary; and Merrill Griffiths of the General Electric Co., treasurer. It was decided to hold the first annual meeting at the Boston City Club on the evening of January 26. Further details will be announced later by the committee.

This dinner will probably be the most notable event ever held in New England, in which the four industries are actively participating. Members of all branches of the industry are actively engaged upon the various committee work. Although the date set is some weeks off, already there is an indication that the demand for tickets will far exceed the number provided for.

The jobbers, manufacturers, and contractors on this day will announce an open house, and prepare to receive and entertain out-of-town customers. This action is the outcome of a sincere desire on the part of the four industries to join together their various activities. This movement has been apparent for the past two years. Indication of this is noticeable from the fact that all jobbers in the city of Boston are associate members of the Elec-

trical Contractors' Association. There are also six central stations in Massachusetts who are associate members.

Meetings which would be of interest to the industry as a whole are well attended by all branches of the industry.

F. S. Price, president of the Pettinell-Andrews Co., has been elected chairman of a new and perpetual organization, similar to California and Cleveland, Ohio.

The slogan of this dinner to be held on the 26th of January is, "2% Increase in 1921."—*J. E. Wilson, State Secretary.*

### Westinghouse Better Merchandising Shows

The Westinghouse Better Merchandising Shows have been meeting with continued success wherever they have been shown throughout the country.

One of the most successful demonstrations was that given through the co-operation of the Hughes-Peters Electric Company at Columbus, Ohio, the shows being exhibited in the Chittenden Hotel of that city. The total attendance which was over 100 embraced contractor-dealers from all over the central portion of Ohio.

A meeting of the Columbus contractor-dealers' association was held on Tuesday evening, November 30, at which talks were given by M. C. Turpin, of the Westinghouse Merchandising Bureau, and Professor F. C. Caldwell of the Ohio State University. Immediately following the adjournment of the meeting, the contractor-dealers were taken through the merchandising show.

An equally successful demonstration of the shows was given through the

co-operation of the Hessel & Hoppen Company, New Haven, Conn., at the Taft Hotel of that city. There the attendance reached the high-water mark of 319. A unique feature of this show was the practical demonstration of the electric range by means of which food was cooked and served to each visitor who attended the show, thus giving not only a practical but a most satisfactory and pleasing demonstration of the advantages of the range. The Hessel & Hoppen Company also demonstrated a number of appliances which they sell to the visitors who attended the show.

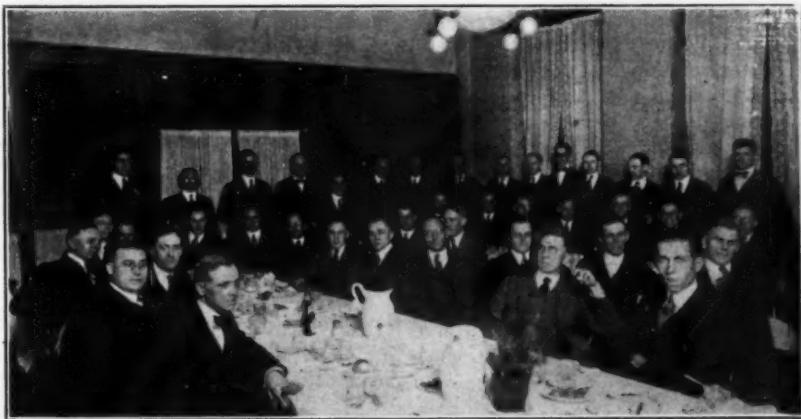
The shows will be put on in Chicago, Omaha, Cincinnati, and Detroit immediately after the holidays.

### Westinghouse Agent-Jobbers Meet

The meeting of the Executive Committee of the Westinghouse Agent-Jobbers' Association was held at the Homestead, Hot Springs, Va., during the week of November 29, and a great many matters of mutual interest were discussed and settled. A new treasurer was elected, H. T. Pritchard, to fill the place of J. E. McClellan, the former treasurer who recently resigned because of severing his connection with the Northwestern Electric Equipment Company, which he did for the reason that his personal business matters necessitated giving his whole time to private interests in which he was interested.

The next annual meeting will be held at the Homestead, Hot Springs, Va., during the week of May 16.

Learn the usefulness of the Universal Data & Sales Book by using it.



Dinner of Electrical Men at Evansville, Indiana, on November 23, Attended by Lawrence W. Davis, Special Representative from National Headquarters. H. T. Sharp of the Public Utilities Company, Was Chairman.

## Lighting Fixture Market

The trade is now discussing the big event of the lighting fixture business—the Annual Convention of the National Council of Lighting Fixture Manufacturers. In fact you yourself are probably planning to go to Buffalo, for the big event is just as interesting to dealers as it is to manufacturers.

There is to be a Fixture Market in addition to the convention. You will be able to inspect at your leisure the season's latest products in the lighting fixture line. You can place your orders on the spot so that you will be sure of delivery at the time when those wiring jobs are ready to have the fixtures installed. You will meet thousands of dealers from all parts of the United States—some of them no doubt personal friends and acquaintances—with whom you can exchange views on the contracting business generally. You will return home brimful of pep and of new ideas on which you can cash in during the season of 1921—and long afterwards. It is going to be well worth your while.

The National Council of Lighting Fixture Manufacturers, under whose auspices these annual fixture markets have been organized, have determined to go one better even the highly successful meeting at Detroit last year, in the ballroom of the Hotel Statler. Experience showed that even the large space there available was too small to accommodate the thousands of dealers who visited the Fixture Market, and the many manufacturers who wished to exhibit their products.

This time the executive committee of the National Council have made arrangements to considerably increase the space available. They have hired the Elmwood Music Hall, whose large auditorium will be devoted to boothspace. The forthcoming Buffalo Fixture Market is to be the greatest collection of lighting fixtures, fixture parts, table lamps, porables, illuminating glassware and lighting novelties ever brought together under one roof.

Mr. Hofrichter, the Secretary-Treasurer of the National Council of Lighting Fixture Manufacturers, is making preparations to make this Convention and Fixture Market a real live proposition of interest to every contractor-dealer, jobber and manufacturer who attends.

It is even rumored that there is to be a daily convention issue of the Council's official publication, National

Lighting Rays, to be issued in Buffalo, containing up-to-the-minute details of the proceedings of the various lighting fixture associations convention meetings—the Lighting Fixture Dealers' Society of America and the Illuminating Glassware Guild as well as the National Council itself.

A letter to National Council Headquarters at 8410 Lake Ave., Cleveland, O., will bring a prompt reply with full details of the programme.

## Cost of Doing Business

National Headquarters Sends Out List of Questions to Members for Annual Compilation

Every year the headquarters of the National Association of Electrical Contractors and Dealers compiles a statement on the average cost of doing business in that branch of the industry. Such a report is of inestimable value to the trade in general and particularly

### Questionnaire Sent Out by National Headquarters

Questions for the compilation of data on the operation and cost of doing business. Replies will be treated as confidential and the figures used for compiling totals and percentages. No signature is necessary.

Make reports on the basis of the year's business ending December 31, 1920.

If you keep separate records of contracting and retailing, or if your business is confined to either one branch, enter figures in Column No. 1 or No. 2. If your records cover both jointly use Column No. 3.

Read notes at bottom of sheet before entering figures. The value of our data depends on the accuracy of your figures.

If using our Standard Cost Accounting System put check mark here: [ ]

### "OVERHEAD" OR COST OF DOING BUSINESS

No. Item.	Contracting:	Retailing:	Contracting & Retailing:
1. Non-productive Labor . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
2. Salaries . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
3. Rent . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
4. Light, Heat and Power . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
5. Postage, Telephone and Telegraph . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
6. Advertising . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
7. Depreciation . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
8. Printing and Stationery . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
9. Inward Freight, Exp. & Cartage . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
10. Delivery Expense . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
11. Insurance—Liability and Fire . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
12. Taxes . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
13. Bad Debts and Allowances . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
14. Ass'n Dues (Nat., State & Local) . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
15. Maintenance of Equipment . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
16. Interest (Borrowed Money or Capital) . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
17. Miscellaneous . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .
<b>TOTAL</b> . . . . .	\$ . . . . .	\$ . . . . .	\$ . . . . .

### FINANCIAL STATEMENT

Current Assets	Current Liabilities
18. Cash on Hand . . . . .	\$ . . . . .
19. Accts. Receivable . . . . .	\$ . . . . .
20. Notes Receivable . . . . .	\$ . . . . .
21. Mise. Inventory . . . . .	\$ . . . . .
<b>Total</b> . . . . .	\$ . . . . .
Fixed Assets	Fixed Liabilities
22. Tools & Equipment . . . . .	\$ . . . . .
23. Prepayments . . . . .	\$ . . . . .
24. Real Estate . . . . .	\$ . . . . .
25. Other Assets . . . . .	\$ . . . . .
<b>GRAND TOTAL</b> . . . . .	\$ . . . . .
	<b>GRAND TOTAL</b> . . . . .

### GENERAL DATA

31. Total Business Billed . . . . .	\$ . . . . .
32. Inventory—Jan. 1, 1920 . . . . .	\$ . . . . .
33. Merchandise Purchased . . . . .	\$ . . . . .
34. Inventory—Jan. 1, 1921 . . . . .	\$ . . . . .
35. Gross Pay Roll—Productive Labor . . . . .	\$ . . . . .
36. No. of Employees—Productive . . . . .	Non-productive . . . . .

**NOTES.** Referring to above items (1) Enter office, shop, store-room or other employees not charged directly to work or sales. (2) Enter all payments to owners, officers or managers. (3) If you own building, enter rental value. (10) If you own your hauling equipment enter cost of operating. (15) Enter cost of upkeep of buildings, tools and equipment. (17) Specify any large items. (25 and 30) Specify items if large. (35) Do not include owners, officers or managers that are included in Item No. 2.

State . . . . . City . . . . . Date . . . . .

to the contractor-dealer who wants to keep within bounds on overhead and general operating items.

The questions sent to members last month were printed on a sheet larger than a page of this magazine, and are of a nature that will prove of interest even to those who are not members of the National Association. Every man in business should take the time to carefully make a survey of his own business according to the plan shown herein, as it is believed that this outline includes every item that is necessary in making a full and complete statement.

The thirty-six questions, with instructions and explanations, are shown in the accompanying reproductions, which are greatly reduced in size in order to give them space.

It will be observed that only the state and city are to be noted, and as no signature and street address are required, those who make these reports will remain unknown and all replies will be considered strictly confidential. Only a composite statement will be made from these reports and when their value is considered every member of the National Association should gladly and promptly make a full and complete return.

## News Notes Concerning Electrical Contractor-Dealers

### Business Changes, Store Improvements, and New Establishments Opened

It is reported that Harvey Quick is opening a new store in Sault Ste Marie, Mich., where he will carry a complete line of electrical appliances. Mr. Quick has also opened a new electric store at Manistique, Mich.

The White Electrical Company has opened a new electric appliance store on West Main Street, De Witt, Arkansas.

James J. Nelson has opened a new electric supply store in Nekoosa, Wisconsin.

The Southern Electric Company has opened a new electric supply store at 403 East Broadway, Louisville, Kentucky.

The Independent Electrical Service Company has opened a new electric store in Wahpeton, North Dakota.

John Gabriel of Fort Fairfield, Maine, has purchased the electrical appliance business of the Haines-Hall Electric Company, having dissolved partnership from Raymond O. Haines.

The Electric Service & Construction Company has opened a new electric appliance store at 3235 E. Anaheim Street, Long Branch, California.

T. N. Torgerson of Morrisonville, Wisconsin, will add a line of electrical appliances to his store which now carries auto accessories.

The Instant Electric Company of Maysville, Kentucky, has opened a new electric supply store. Incorporated capital \$25,000. Incorporators: A. Clooney and others.

W. H. Doctor has purchased the electric supply store of Duane & Lovelace on Main Street, Martinez, California.

Louisville Light Company of Lewisville, Texas, will add a line of electrical appliances to their electric light and power business.

Thor Electric Shop, Inc., is opening a new electric appliance store at 408 Fifteenth Street, Denver, Colorado.

Congress Square Electric Shop has opened a new store at 17 Forest Avenue, Portland, Maine, where a full line of electric goods will be carried.

The Consol Electric Company has opened a new electric store in Muscatine, Iowa. Incorporated capital \$10,000. Incorporators: F. C. Stroup and others.

John P. Mitchell and L. T. Wilder have formed partnership and will conduct an electric supply store in Scout Hall Block on Maple Street, Sterling, Mass. They were formerly of the firm of Mitchell-Sawyer Company.

Harper & Hansen have opened a new electric shop at 13 North Franklin Street, Janesville, Wisconsin.

J. C. Rowland will open a new store in Orange Cove, California, where a full line of electric supplies will be carried.

Edward Bodell is opening a new electric supply store in Bottineau, North Dakota.

The Easy Bay Electric Company has opened a new electric appliance store at 1025 Macdonald Street, Richmond, California.

The Lane Electric Shop is opening a new store at 246 Main Street, Oneonta, New York, where a full line of electric supplies will be carried.

The Seering Electric Company has opened a new electric supply store at Beaver Dam, Wisconsin.

The Plaza Electric Company has opened a new electric store at 325 William Street, Bridgeport, Conn. Incorporators: President, F. M. McCue and others.

The Eveready Electric Company is going to enlarge its present electrical contracting and retailing business at 52 High Street, Clinton, Mass., by leasing another floor directly above, which they will use as a show room.

Hughes, Huestis & Lake, have purchased from A. L. Gulbro, an electric supply store at Devils Lake, North Dakota.

Ralph Wolf will open a new electric appliance store at Colymans, New York.

Wm. Crichter & Son of Leon, Iowa, are occupying a new hardware store just remodeled. They request catalogs on flashlights and other electric appliances.



Contractor-Dealers of Newark, New Jersey, Held Outing at Seidler's Beach, September 17, and Went Over the Top With Fifteen New Members

Hart-Wright Company is opening a new electric store at De Land, Florida.

The Sterling Electric Company, formerly located at 802 French Street, Wilmington, Delaware, has opened a new electric store at 219 Eleventh St.

Sylvester Martin will increase the stock of the electrical business purchased from the Gregory Lighting Company located at California, Pa.

Sells, Warren & Sells have opened a new store carrying electric supplies in Buffalo, New York. Incorporated capital \$10,000. Incorporators: Harrison G. Sells, Henry H. Warren and Judson M. Sells, 278 Depew Street, Buffalo.

The Electric Shop will open a new electric supply store at 5 East Pine Street, Orlando, Florida. P. Acker is proprietor.

E. L. Knight & Company are remodeling the store located at 449 Washington Street, Portland, Oregon, where a full line of electric supplies will be carried.

Lyons Electrical Appliance Company has leased larger quarters at 57 South Laurel Street, Bridgeton, New Jersey. They also have a branch store at 209 South Broad Street, Woodbury.

E. A. Koeneman Electric Company has opened a new electric store at East St. Louis, Ill. Incorporated capital \$20,000. Incorporators: E. A. Koeneman and others.

Coldren's Electric Shop is going to have alterations made to building located on Main Street, Riverside, California. A full line of electric supplies will be carried.

G. C. Lemely and F. A. Smith have opened a new store at 304 Eighth Street, Des Moines, Iowa, where they will carry a full line of electric appliances.

The Fairmont Electrical Company is opening a new store carrying electric supplies at Fairmont, Minnesota. Capital \$25,000. Incorporators: C. Wehrenberg and others.

Bowker-Crosbie Electric Company of Malone, New York, has leased the building adjoining their present electric appliance business and will use same as sales department.

The Hartford Electrical Appliance Company has opened a new electric supply store at Hartford, Michigan. Incorporated capital \$11,000.

E. C. Clendenning of Gladwin, Michigan, has opened a new electric store.

The Herbrand Electric Company is opening a new electric store at Mansfield, Ohio.

The Stroud-Michael Company has opened a new electric store at 25 Washington Street, Monroe, Michigan.

The Household Electric Company has opened a new electric supply store at 112 South Elizabeth Street, Lima, Ohio.

The Home Electric Company has opened a new electric supply store at Menominee, Michigan. Leibherr and Baker are the proprietors.

James A. Coudret is opening a new electric appliance store at Oak Park Avenue and North Boulevard, Oak Park, Illinois.

Francis Schulky is opening a new electric supply store at Northwood, North Dakota.

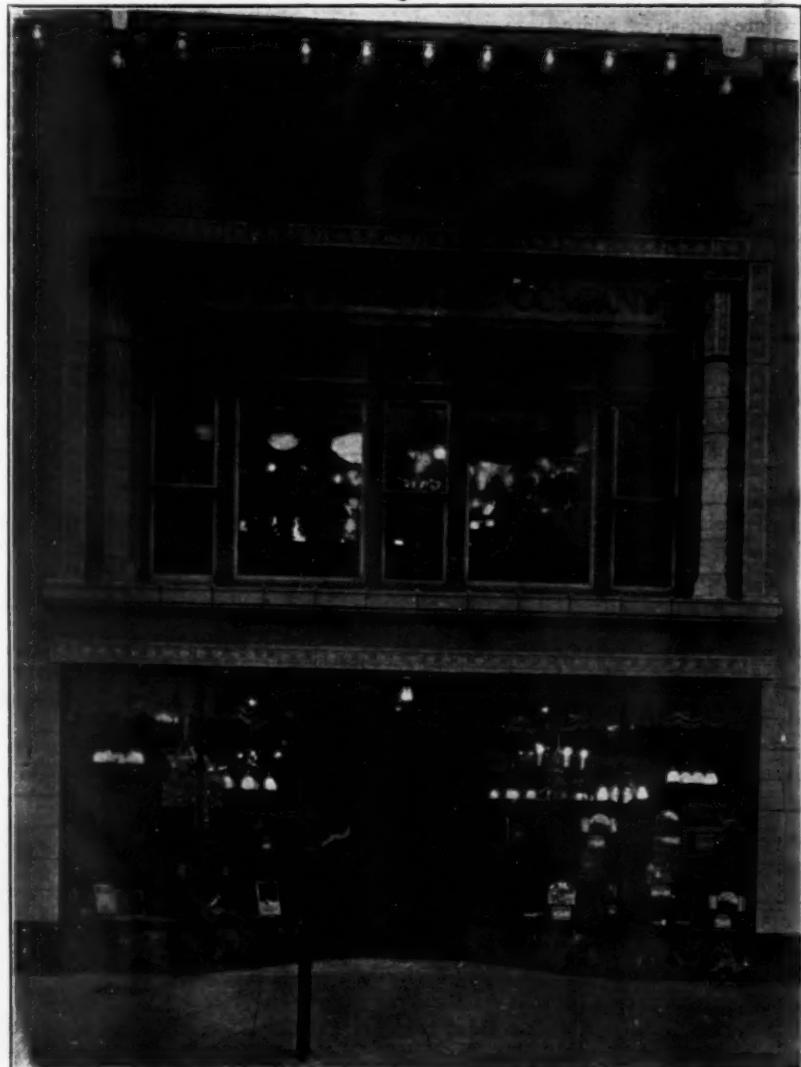
L. C. Leslie and W. E. Hewston will open an electric store at 3316 Atlantic Avenue, Atlantic City, New Jersey.

T. O. Charles has opened a new electric supply store on Canal Street, New Smyrna, Florida.

L. L. Alber is opening a new store carrying electric supplies at 25 West Market Street, Wabash, Indiana.

Fred J. Luby of 5 Pine Street, Milford, Mass., will move to 113 Central Street, where he will carry electric supplies.

The Electric Shop has opened a new electric appliance store at Childress, Texas.



The Double Deck Store of the Gem City Electric Company, Quincy, Ill., Showing Display on Second Level as Well as Street Floor

# •MANUFACTURING•

A Department Devoted to the Latest Devices Used by the Electrical Contractor and Dealer



## New Rheostat

The users of farm lighting equipment generally appreciate the importance of having simple charging rheostats of reliable construction for keeping their automobile batteries in good condition in the spring and fall months. The C-H Charging Rheostat, shown in the illustration, stands up exceptionally well, even under severe conditions of service, and is easily installed and operated.



To charge small batteries with this rheostat, set dial to correspond to number of cells to be charged, and throw switch.

The name plate bears the directions for charging. The rheostat is connected in one of the lines from the 32-volt generating set and in series with the battery to be charged. A dial plate underneath the operating handle is marked to indicate the proper setting for charging certain numbers of cells. The handle is moved until the arrow is at the proper point on the dial plate, after which the battery circuit is closed, and the charge begins.

For example, when the line on the rotating dial between the lettering, "6 cells, 12 volts" is in line with the arrow on the name plate, and the circuit closed, charging will begin. For 3 cells, 6 volts, further turning of the knob brings the corresponding line to the arrow point. An ammeter to measure the charging current is not necessary, as the current will be of the proper value—approximately 5 amperes—when the handle is in the right position as indi-

cated on the dial. The dial may be provided with marks for batteries consisting of 3, 6, 9 and 12 cells.

The rheostat is very small and compact, being about 6 inches in diameter, and is readily mounted on any flat surface, such as a switchboard or wall, by means of three screws or bolts.

The resistor wire is reflexed to provide for expansion and is fastened to a special base of molded insulating material, which will withstand a high heat without cracking or chipping. The entire structure is then covered with a special cement and sprinkled with sand, which acts as a binding agent. This gives the rheostat a waterproof construction so it may be used satisfactorily in moisture laden places such as basements. The front of the rheostat is entirely enclosed in a well ventilated pressed steel frame. The operating knob is of molded insulating material.

This rheostat, made by The Cutler-Hammer Mfg. Co., of Milwaukee, provides a reliable means of charging small batteries from a 32-volt source of power, without the use of any other instrument or device.

## Better Ventilation

In a completely illustrated booklet issued by the Frank Adam Electric Company of St. Louis, the claim is made that panel boards, cabinets and switch-

boards made by this company have been installed in every state in the union.

The accompanying illustration portrays the interior view of a modern factory office, showing FA Fan Hanger Outlets installed in the columns and walls so that there is an even distribution of the cool breeze throughout the office.

It is a pleasure to work in an office like this.

In this present age every modern building should be arranged for fans, and as the old style ceiling fan has been displaced with the more up-to-date oscillating fan, this made it necessary to take care of its installation, and the FA Fan Hanger Outlet is the only solution.

The present low cost of current makes it possible for everyone to have fans, even in their homes. Why deprive them of this comfort while they are at work?

The extra expense is very small compared with the results obtained.

## Sootless, Fumeless and Noiseless Exhibits

The exhibit of the General Electric Company at the New York Electrical Show provided an opportunity for the public to see a number of the most recent developments in the electrical industry, especially in industrial heating apparatus.



View of Modern Factory Office Showing FA Fan Hanger Outlets Installed in the Columns and Walls. Frank Adam Electric Co., Manufacturers, St. Louis, Missouri

Among the various type of apparatus featured were a boxtyle japanning oven, furnished by Young Brothers Company of Detroit and a heat treating furnace, furnished by the George J. Hagen Company of Pittsburgh.

The automatic temperature control panels, and heating units in these two equipments were of General Electric Company manufacture. Some of the smaller devices that were more or less of the same class were a tool-room heat treating muffle furnace, a self regulating lead melting pot, water jacketed and jacketless glue pots, an immersion heater, and a number of various sizes of cartridge and helical coil heating units.

One of the impressive features of the display was the fact that the various furnaces, ovens, etc., were all in operation. This brought out, with a clearness that no amount of explanation could equal, the cleanliness, and quietness of electricity as applied to industrial heating. The fact that these devices could be operated in an exhibition room without filling the place with soot, fumes, and noise, to say nothing of raising a temperature to an unpleasant degree was conclusive proof of their advantage.

### Bryant Toggle Switch

Users of household electrical appliances, such as washing machines, mangleers, etc., have exhibited a preference for apparatus having an electric switch mounted thereon. The most convenient device for this purpose is a Toggle-switch as here shown, which is manufactured by the Bryant Electric Company, of Bridgeport, Conn.



The detailed illustration shows the base is of porcelain in which the mechanism is fastened by means of screws from the under side of the porcelain, and sealed in accordance with Underwriters' specifications to prevent loosening.

The contacts of the switch are of phosphor bronze and are secured be-

neath the binding "posts", which are provided with two ears to prevent wire slipping out from under the binding screws when latter are tightened.

The actuating spring is of specially tempered steel music wire which provides a quick "make and break" contact in operation. The covers are brass, polished nickel and with sheet fibre insulation lining the entire inner surfaces. The indication feature is supplied on the outside of the covers.

The manufacturer identifies this device by catalogue number 2902.

### New Ironer

The new Thor Electric Ironer is described by the manufacturer, the Hurley Machine Co., as representing an entirely new mechanical departure in electrical home labor saving appliances. This new ironer removes the last bit of work from ironing, for the operation of the ironer itself is automatic.



A touch on a small lever conveniently placed on the feed board, throws the shoe into gear with the motor and the shoe moves smoothly into one of the three open positions or into the closed position, as the operator may desire. Two buttons placed on the control lever are shifted up and down according to the position into which the shoe is to be moved. The operation is extremely simple and requires no more effort than turning an electric switch. The operator is thus relieved of the exertion and time required in operating the shoe by hand or foot pressure and the hands are free to guide the pieces being ironed. This complete control of all operations with a touch of the finger, furthermore, enables the woman to iron when sitting as easily as when standing and without the necessity of getting up for any of the operations.

For the further convenience of the housewife, the roll is given two speeds, one a standard speed of eight feet per minute for heavy pieces, and the other

of 12½ ft. per minute for handkerchiefs, towels, and other light pieces.

Another feature of equal importance from a mechanical standpoint is the direct shaft drive which eliminates all troublesome belts and pulleys. All gears are enclosed and run in lubricant. No oiling is necessary.

The supporting arm at the left end of roll permits easy ironing of not only collar and cuffs, but also ruffles and pleats. The de-mountable frame is built on the three point suspension principle. This is to insure an even pressure of the shoe against the roll though the floor upon which the machine rests is uneven. Large swivel casters permit the ironer to be easily moved.

### Luminous Acorns

Harvey Hubbell, Inc., Bridgeport, Conn., is now prepared to furnish any pull socket or pull switch which is listed in catalog number 16 of that company, complete with luminous acorn, as shown in the accompanying illustrations.



The socket shown is three-eighths actual size, and the pull chain is actual size.

The company also has a luminous acorn of the adjustable type which may be readily attached to pull devices already installed.

### Electric Cookery Employed

The Erner Electric Company, Cleveland jobbers, entertained the Cleveland Woman's Advertising club on November 9, at an electrically cooked dinner. The affair was held in the clubroom in the new Erner building, 1240 Ontario street. George S. Miller, general manager, spoke on the value of electrical household appliances as labor savers, and Frank B. Rae, Jr., gave a talk on the opportunity for the advertising woman in this field. The manufacturer's problem of overcoming woman's natural conservatism towards machinery, and the fact that this difficulty is

best disposed of by advertising the appliances from the woman's point of view, were too high spots in these talks.

In the electrical kitchen adjoining, the club members inspected the ranges on which the meal was prepared, and showed considerable interest in other electrical devices on the floor. This is said to have been the first club dinner ever cooked by electricity in Cleveland.

### Plug Cap and Attachment Plug

The body of No. 6720 Plug Cap manufacturer by Harvey Hubbell, Inc., Bridgeport, Conn., is made of tough, black composition, with a large milled edge, supplying an excellent grip for the fingers. The hole is big enough to admit weatherproof or asbestos covered wire, while a generous space is provided for knotting the two cords and preventing all strain on the contact screws. A disk of black fibre locks down over these contacts, and will not slide forward on the blades.



It has a capacity of 20 amperes at 250 volts, ample for all 32-volt Farm Lighting Circuits. The blades are of heavy brass, set "polarized," are interchangeable with all Hubbell 20-ampere Receptacles, and will not work loose or bend easily.

It is a Cap made for continuous, trouble-free service, in house or barn, dairy or garage, and stands up to every requirement.

The Company's Composition Attachment Plug No. 6712 is also shown above.

### Metal Display Cabinet

Display of the widely used C-H 70-50 Switches is greatly enhanced by the metal display cabinet shown in the illustration. This cabinet is being distributed by The Cutler-Hammer Mfg. Co. of Milwaukee, Wis., to many dealers in these switches, and will help to stimulate trade for these devices.

The cabinet consists of a lower and upper compartment, each capable of holding a complete carton of ten switches. The carton in the upper compartment is covered with glass, so the switches are in plain view of the cus-

mer. The metal display panel is mounted on top of the cabinet proper and is held in place by two upright rods supported from the rear of the cabinet.



The panel shows a C-H 70-50 Switch attached to a toaster cord and another on an iron cord, each being shown in an oval insert. In the center is a switch and handle, with the following caption above; "Tells When the Current Is On". This is all attractively displayed in three colors.

### Spartan Vacuum Cleaner Connector

Manufacturers of electric vacuum cleaners have experienced some difficulty in obtaining devices which are best suited for connecting the wires from motor to the switch connection at lower end of handle.

To meet this need, the Bryant Electric Company of Bridgeport, Conn., offer the Spartan receptacle—handle connector No. 138, here shown.



A heavy fibre tube which is longer than the porcelain connector body is provided to insulate the binding screws or wire terminals from the handle. Thus it is immaterial whether the handle is of metal or wood, the danger of short circuit is eliminated. The body of the connector is provided with contact slots for plug caps and binding posts for wires which are securely staked and riveted to prevent any possibility of loosening.

This connector is very compact, being only 1 3/8" long by 7/8" diameter, with a slight flange 1 3-16" diameter to hold the device at end of handle. A radically positioned hole through insulation tube and in connector body is

designed to receive set screw in the handle and prevent the loosening or turning of connector after it is installed.

### Dealer Helps

From the Robbins & Myers Company, Springfield, Ohio comes a dealer's help booklet that customers of that company should carefully read. It explains the methods of conducting a campaign for R & M fans and tells of the company's extensive advertising.

In addition to the national advertising done by the Robbins & Myers Company, the dealer is supplied an attractive line of advertising material for his local tieup to the national advertising. This includes window display material, mailing booklets, folders, lantern slides, a motion picture film, and electros or mats for local newspaper advertising.

This material is furnished free, transportation prepaid to dealers who stock R & M fans.

### Does Scientific Farming

Lloyd George has taken to scientific farming. The continued shortage of farm labor has influenced him to adopt several of the labor saving devices which have become so common among the leaders of agricultural circles in recent years. A Western Electric Power and Light Outfit has been installed on his farm.

The affairs of state are not giving him very much worry at the present time. The Irish troubles and the labor unrest in Great Britain are not bothering him at all according to his own statements. The Lloyd George in question is a well known farmer of Columbia County, Pennsylvania.

### The Lighting Fixture Market

Takes Place Next Month in Elmwood Music Hall, Buffalo, New York

Buffalo seems to be a popular place for all kinds of exhibitions and conventions this year. Next month the Lighting Fixture Market will be held in that city, and next July the N. A. E. C. D. will hold its annual convention there.

The Lighting Fixture Market starts on February 14, at Elmwood Music Hall, and it is reported that a large number of booths have been engaged for exhibition purposes.

C. H. Hofrichter, 8410 Lake Avenue, Cleveland, Ohio, is in charge of this year's Lighting Fixture Market.

## Condensed Notes of Interest to the Trade

George Richards & Company, Chicago, send out an illustrated folder on Hemco Twin-Lite Plugs. This company now has a supply house at 344 East 40th Street, New York City. Pettingell-Andrews, Boston, are the New England agents, and Geo. A. Gray & Company, San Francisco, are agents for the Pacific Coast.

Barnes & Irving, Syracuse, N. Y., are putting out the Arrow Angler, with which can be formed any angle. It is the invention of P. F. Freytag, a practical mechanic, and is a handy tool to carry in the pocket.

"The Washer that Needs No Watching" is one of the slogans used by Landers, Frary & Clark, New Britain, Conn., in a big colored broadside used to portray the merits of the new Universal Electric Washer manufactured by that company.

C-H Convector Type Electric Air Heaters are illustrated and described in a new leaflet being distributed by The Cutler-Hammer Mfg. Co. of Milwaukee and New York, and known as Publication 862. The leaflet also tells briefly the advantages of electric heat over other forms of heating and gives thumb rules which enable the customer to closely estimate the number or size of heaters required for any particular installation. The C-H Convector Type Air Heater is described as being a compact and sturdy appliance. It consists of several of the widely known C-H Space Heaters mounted horizontally between cast iron end plates and completely enclosed in a protecting screen of perforated sheet metal, so that nothing inflammable can touch the heaters or any live parts. The heaters are made in eight different capacities ranging from 1 to 5 kilowatts for standard commercial voltages, and all except the smallest and largest sizes are designed for three different heats.

An Industrial Self-loading Truck of greatly improved design has recently been placed on the market by the Industrial Truck Company, Division of Cowan Truck Company, Holyoke, Mass.

Effective the first of December, Herbert T. Lewis has been appointed manager of the Philadelphia office of the Robbins & Myers Company succeeding the late A. S. Tarr. Mr. Lewis entered the employ of the Robbins &

Myers Company February 22, 1913 as a salesman in the Philadelphia office. The territory under his jurisdiction will include the states of Pennsylvania, Virginia, West Virginia, Delaware, Maryland, North Carolina, South Carolina, Georgia, Florida, southern New York and eastern Tennessee.

C. B. Merrell, who has been for a number of years in the general offices of the Economy Fuse & Manufacturing Company, Chicago, has been appointed District Sales Manager of the Philadelphia office, 523 Widener Building, vice E. J. Watson, resigned.

"Control of Motor Car Lighting" is the title of a new catalog descriptive of C-H Automobile Lighting Switches. Both the Standard and Pony line of switches are listed and wiring diagrams illustrate eight different control combinations for lights that may be obtained by these switches. The switches are described as having large wiping contact surfaces, with contactor floating on the operating shaft so vibration and side strain on the button does not cause the lights to flicker. The switches may be arranged horizontally or vertically in gangs of from one to four with one plate covering all. Automobile door switches, spot light switches and magneto switches are also described. The various switches are illustrated, and several views show them mounted on automobiles and trucks. The catalog is known as Publication 861.

Frank Thornton, Jr., chief engineer of the Westinghouse Electric Products Company, has been appointed manager of the electric heating engineering department of the Westinghouse Electric & Manufacturing Company. Mr. Thornton was graduated from the University of Missouri in 1908, and spent a year studying in Europe. He joined the Westinghouse Company in May, 1909, after spending some time in the graduate students course, he became engaged in engineering work on electric heating devices.

Royal Breezes, a dealer's house organ published by The P. A. Geier Company, Cleveland, contains an interesting item in the December issue on the subject of selling electric cleaner attachments. The author points out that the offer of attachments is too frequently an after thought on the part of the salesman and that more successful results will follow if the cleaner and attachments are presented to the housewife as a complete

cleaning service rather than a machine with accessories.

W. L. Griffin, advertising manager for the National X-Ray Reflector Co., Chicago, was elected to the board of directors, Advertising Men's Post of the American Legion, at their annual election Monday, December 6, 1920.

Frederick B. Eaves, assistant general sales manager of The Bryant Electric Company, died suddenly of heart failure on Sunday, December 12. Mr. Eaves was a graduate of Harvard University, class of 1905, and had been connected with the Bryant Company for over nine years. Until 1918 he was field representative of the company in New England and New York State. During the war he served in the electric power and equipment division of the War Industries Board, having charge of the question of essentials as it related to the electric jobbing industry of the country. Soon after the signing of the armistice he returned to the services of the Bryant Company, and in 1919 made an extended trip through Europe as a special representative of the company's export department. Mr. Eaves was unmarried. He is survived by his mother.

## An Indignant Protest

This is to notify the public that reports to the effect that I am sick are erroneous.

If I am ill, pure gold has the mumps. I did admit to a friends that the way some folks act these days makes me feel sick but that is all there is to it.

Never in all my long, illustrious life have I felt so useful; It is pep, not pip, that I have.

Maybe I am not as popular as once but the day will come when people who now treat me with contempt will be glad to have me for a pal.

If I cannot do the things I used to, it is only because I am not given the chance; organically I am sound and I want it known that by the might of my sacred E. Pluribus Unum they don't make them any better.

Therefore be it known by all men, women and little children that if you save me now when it can be done without much trouble, later on I will save you from trouble.

Yours for an Easy Chair in Your Old Age,—U. S. Dollar.

Government Savings Securities help you to save and increase your savings.